

PV.
CLERK'S COPY.

175

402909
Sup CT,

Vol. IV
TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1940

No. 267

**SIX COMPANIES OF CALIFORNIA, HARTFORD
ACCIDENT AND INDEMNITY COMPANY, ET AL.,
PETITIONERS,**

vs.

**JOINT HIGHWAY DISTRICT No. 13 OF THE STATE
OF CALIFORNIA**

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE NINTH CIRCUIT**

PETITION FOR CERTIORARI FILED JULY 22, 1940.

CERTIORARI GRANTED OCTOBER 14, 1940.

United States
Circuit Court of Appeals

For the Ninth Circuit.

SIX COMPANIES OF CALIFORNIA, a corporation, and
HARTFORD ACCIDENT AND INDEMNITY COMPANY,
a corporation, FIDELITY AND DEPOSIT COMPANY
OF MARYLAND, a corporation, THE AETNA CAS-
UALTY AND SURETY COMPANY, a corporation, IN-
DEMNITY INSURANCE COMPANY OF NORTH
AMERICA, a corporation, AMERICAN SURETY COM-
PANY OF NEW YORK, a corporation, MARYLAND
CASUALTY COMPANY, a corporation, UNITED
STATES FIDELITY AND GUARANTY COMPANY, a
corporation, THE FIDELITY AND CASUALTY COM-
PANY OF NEW YORK, a corporation, GLENS FALLS
INDEMNITY COMPANY, a corporation, STANDARD
SURETY AND CASUALTY COMPANY OF NEW YORK,
a corporation, STANDARD ACCIDENT INSURANCE
COMPANY, a corporation, MASSACHUSETTS BOND-
ING AND INSURANCE COMPANY, a corporation, CON-
TINENTAL CASUALTY COMPANY, a corporation, and
NEW AMSTERDAM CASUALTY COMPANY, a corpo-
ration,

Appellants,

vs.

JOINT HIGHWAY DISTRICT NO. 13 OF THE STATE OF
CALIFORNIA, a public corporation,

Appellee.

Transcript of Record

In Eight Volumes

VOLUME IV

Pages 983 to 1470

**Upon Appeal from the District Court of the United
States for the Northern District of California,
Southern Division.**

Friday, April 22, 1938;

10:00 o'clock a. m.

LEWIS MICHAEL LARSON,

Cross-Examination (continued).

Mr. Tinning: Q. Mr. Larson, yesterday, when we were discussing the placing of concrete in the forms, you understood me to mean in horizontal layers, did you not? A. Yes.

Q. I used the word "vertical"; and, in running through the testimony, this morning—

A. Yes; I thought I knew what you intended.

Q. I did not know I said that. I meant—

A. Horizontal layers.

Q. Yes. And your answers, in other words, showed you understood it so? A. Yes.

Q. You stated that you proposed, in the excavation, in the placing of timbers in the tunnels, to place, or to leave, the timbers in the Monterey sandstone and the opening, or portal section, of the tunnels, and to remove the timbers in the cherts and the Orindan—That was your testimony?

A. Yes.

Q. And we understood it, with respect to Plaintiff's Exhibit No. 27, Section "AA" and Section "BB," that way? A. Yes.

Q. I would like to show you revised schedule submitted by Six Companies of California to the District, with a letter dated August 9, 1934. This revised schedule was submitted, if I recollect your testimony, before you had gone underground, except with possibly the two center drifts that we

(Testimony of Lewis Michael Larson.)

were looking at in the photograph yesterday? If you will look to the left, "Company Work Tunnel Proper," you will find an excavation schedule which shows that you, at that time, intended, or had planned, at the time this was made up, even though it was presented on August 9th, to commence excavating in the west [920] portal of the tunnels, on July 20, 1934, and finish that work by September 5th; and the figure that was contemplated, under your proposal that you have outlined, was 40 feet in each of those portals. Will you please examine the number of yards that appear as the contemplated quantity of that total of 80 feet in the two tunnels,—3,145 cubic yards? It is a fact, is it not, Mr. Larson, that there were, in the neat sections—there were 35.6 cubic yards of material?

A. I believe that is correct.

Q. And it is a fact, is it not, that the figure of 3,145 cubic yards in the west portal section of 80 lineal feet is just 10 per cent more than 35.6 yards per foot?

A. I would have to reduce that to—

Q. Well, I have; but, if you would like to do it and check me, it would probably be advisable. Would you like a piece of paper?

A. Yes. That shows in excess over the neat.

Q. In other words, 10 per cent in excess of the neat or net quantity of excavation. It is likewise true, is it not, that the Monterey Sandstone shows the same thing?

A. It appears so.

(Testimony of Lewis Michael Larson.)

Q. And likewise true that the Claremont cherts shows the same thing? A. So it appears, yes.

Q. It is likewise true the Orindan shown the same thing?

A. That is true, it appears so.

Q. So that the estimated quantity of excavation was exactly the same in the section of the tunnel in which you planned to leave the timbers as it was in those in which you planned to remove them?

A. That is true.

Q. And your schedule, at that time, submitted on August 9, 1934, shows that you planned to commence placing concrete on the 15th day of August, 1934, and to complete doing so on the 31st day of July, 1935—You will look at the black line there—

[921]

The Court: I am afraid you will have to assist me with this schedule.

Mr. Tinning: Well, your Honor, I will have to—need assistance, myself, because I read the wrong line; it is a combination of bifocal glasses and cross section paper.

Q. If you will look, Mr. Larson, at the heading "Concrete Walls and Arch," and then follow, off to the right, along the black line, you will find—Maybe you can do much better?

A. Your Honor, the line I was trying to show is here.

Mr. Tinning: It was misstated in my question.

(Testimony of Lewis Michael Larson.)

Q. The line opposite "Walls and Arch,"—that is the concrete lining, is it not, Mr. Larson?

A. Yes.

Q. I, instead of starting at the date that I stated in my former question—it is shown on this revised schedule, on August 9th—it commenced September 5, 1934, and planned to finish September 10, 1935.

The Court: Oh, I see.

Mr. Tinning: The dates are above that. Here is September. This line comes to the 10th; each one of those is a five-day period.

The Court: Yes, I understand.

Mr. Tinning: Here is the 5th day of September, and the 6th day of September.

The Court: I see.

Mr. Tinning: Q. After your assistance, my statement of what that schedule shows, with respect to the proposed time, is correct, is it not, Mr. Larson? A. Yes.

Mr. Tinning: If the Court please, we will offer the letter and schedule of August 9, 1934, submitted by Six Companies of California to the District named, as defendant's exhibit in proper order.

[922]

(The document was marked "Defendant's Exhibit N.")

[Set forth in the Book of Exhibits at page 363.]

Mr. Tinning: Q. I will show you revised schedule of proposed construction submitted to Joint Highway District by Six Companies of California

(Testimony of Lewis Michael Larson.)

on February 12, 1935, Mr. Larson. I will ask you if you will observe the figures on the left, under "Company Work Tunnel Proper Excavation." Those figures are the same as on the schedule of August 9, 1934, are they not?

A. I believe they are.

Q. And, to save time, they also include exactly the same 10 per cent beyond the neat excavation line; they are the same, Mr. Larson, are they not?

A. Yes, I think they are.

Q. And show that, in the schedule submitted on February 12, 1935, the amount of excavation contemplated, in the west portal section, Monterey sandstone, Claremont cherts and Orindan, was all the same?

A. Was that a statement or a question?

Q. I am saying that the amount per lineal foot was estimated to be the same.

A. It was estimated to be the same.

Q. Yes. A. Yes.

Q. One other question in connection with that schedule, Mr. Larson: If you will look off to the right this time from the heading "Walls and Arch," you will see that that work was scheduled to start May 1, 1935?

A. You are thinking now, Mr. Tinning, I suppose, of the continuation with the lining?

Q. Yes. There is shown, on the schedule, between November 15th and December 15th, a short line covering a period of one month, which covers

(Testimony of Lewis Michael Larson.)

the installation of the concrete in the first 110 feet in the north side, and 92 feet in the south portion?

A. Yes.

Q. Then the line is broken, and shows the resumption, or the planned resumption, of the concrete placing in the tunnel lining on the first day of May, 1935, and shows the contemplated finishing of the [923] lining on April 15, 1936?

A. April 10th, isn't it, Mr. Tinning, rather than the 15th—if that is material?

Q. It is material; but my bifocals are not very good. Each one of these squares is 5 days. As a matter of fact, you left the work on the day before this schedule shows it was intended to resume the concreting? A. I left on April 30th.

Q. And the schedule shows that it was intended to commence concreting on May 1st; and, when you left, there were no steel forms on the job for the concreting? That is correct, isn't it?

A. That is correct.

Mr. Tinning: We will offer this schedule of February 12, 1935, together with a letter dated February 12, 1935, from Six Companies of California to the District, as defendant's exhibit in proper order.

(The documents were marked "Defendant's Exhibit O.")

[Set forth in the Book of Exhibits at page 367.]

Mr. Tinning: Q. Mr. Larson, when you were testifying here some days ago with reference to the

(Testimony of Lewis Michael Larson.)

specifications and your understanding of them, you read a portion of Paragraph "B" in Section 32, from page 59 of the Specifications.

Mr. Trefethen: May I have that note again? Paragraph what?

Mr. Tinning: Portion of Paragraph "B", Section 32, page 59.

Q. You read a sentence that commences—It is in the right-hand column—You said this sentence was one of the things that caused you to conclude, because it required, or provided for, the removal of timbers—caused you to conclude that it was contemplated that the material throughout the tunnel would be in self-supporting ground. The sentence you read, or the portion that you read, as I have it marked—and I think it is complete—says:

"Where timber is employed for tunnel timbering it shall be removed before any concrete is placed, and any spaces outside the neat lines of the concrete structure caused by such removal shall be filled [924] with concrete as above provided. In the event that it is found impracticable, in the opinion of the District Engineer, to remove timbering or portions thereof, such timbering may be allowed to remain permanently in place, but in no case shall such timber so remaining be allowed to project into the neat lines of the concrete structure. Where timber is permitted to remain, all spaces outside of the neat lines of the concrete

(Testimony of Lewis Michael Larson.)

structure shall be filled with concrete mixed in the same proportions and placed at the same time as the concrete in the neat structure. If structural steel shapes are used for tunnel sets they may be allowed to remain permanently in place provided that they do not project into the concrete more than four inches (4") beyond said neat lines of the concrete structure."

When you worked on some of the estimates that you prepared for other tunnel jobs, do you recollect that you found similar provisions in the specifications?

A. Are you referring now to the Broadway Tunnel?

Q. No. I said for other estimates on other jobs. You know, we have been at this a long time, and we are talking about some other tunnels here at other stages in this proceeding? A. Yes.

Q. For instance, you said you prepared an estimate on the Sunset Tunnel? A. Yes.

Q. You prepared them on several other tunnels? A. Yes.

Q. Isn't it true that what I have read here is stated in all specifications for tunnels in substantially the same language?

A. I am not prepared to answer "Yes" to that, Mr. Tinning. I would have to trust entirely to my memory. My memory might be at fault.

Q. Do you remember this provision in the specifications for the Sunset Tunnel—and I am reading

(Testimony of Lewis Michael Larson.)

from page 25, gentlemen, of the specifications for the construction of a tunnel known as Buena [925] Vista Tunnel, San Francisco Specifications No. 14646. The sections are not numbered in this set; the best I can do is give you the page:

“All sheet piling, lagging, bracing, shoring or timbers shall wherever practical be removed from the excavation except where the City Engineer shall expressly order the same to be left in place. All vacancies left by the removal of sheet piling, lagging, bracing, shoring or timbers shall be back-filled as herein specified. The contractor shall be responsible for any injury which may result to the work or any other structure by the removal of lagging and bracing.”

Do you remember that provision?

A. I would not; that is too long since.

Q. When you prepared the estimate, were you led to believe, by reading the provisions of the specifications, that you could expect to find self-supporting ground as you drove through the Sunset Tunnel? A. I cannot recall—

Q. Would you answer “Yes” or “No”—Were you led to believe—

A. I cannot remember.

Mr. Smith: He says he cannot remember. That is an answer, Mr. Tinning.

Mr. Tinning: Q. You cannot remember?

A. I cannot remember; that is too long since, and I don't remember, right now, whether there

(Testimony of Lewis Michael Larson.)

was a geological report to help bring out that thought.

Q. All the timbering was left in, in the Sunset Tunnel, was it not? A. I don't remember.

Q. Isn't it a fact that you stated, earlier in your testimony, that where the timber was taken out, where such a provision appeared in the specification, that you believed then that the ground must be self-supporting?

A. I referred to the Broadway Tunnel, [926] coupled with the geological report, in making that statement.

Q. In other words, it is the geological report that you need to draw your conclusion, not the specifications? A. Both.

Q. Both? A. Both.

Q. Why, if you need both, would you say, if there was no provision for a geological report on the Sunset Tunnel, that this provision did not mislead you?

A. I cannot remember my conclusion on the Sunset Tunnel; and I am really not prepared to make any definite statement as to what my thoughts were on it.

Mr. Tinning: Gentlemen, we would like to offer this section that I have just read in my question.

Mr. Smith: Offer the whole thing.

Mr. Tinning: Well, we would be glad to do that, but the only thing is I cannot provide you with a copy. This is the only copy we have. I would like

(Testimony of Lewis Michael Larson.)

to offer that in the record. I will have this whole thing photostated.

Mr. Smith: We are interested in the whole thing.

Mr. Wittschen: The witness testified that he figured the Sunset Tunnel, and he also testified, in his earlier statements, that, wherever the timber was to be removed, he assumed the ground was self-supporting; and he also testified, previously, he has forgotten it today, that the Sunset Tunnel—it was not self-supporting,—a great portion of it. All we want to put in is the pertinent portion of the Sunset Specifications. Why put in reams that don't apply to this part of the case or the witness' testimony?

Mr. Marrin: There may be other provisions of the specifications bearing on that.

Mr. Wittschen: We will permit you to examine them, and you can offer any part you want. We are not objecting. [927]

Mr. Tinning: We have no objection to that, your Honor; but it happens this is an old document; this is the one copy that we have, but I will be glad to have it go in so the record here will be complete; and I will propose, by next Tuesday morning, to have photostatic copies of the—

Mr. Wittschen: That is quite a job. You can leave them that book and let them put in what portions they wish.

The Court: Let them examine it. You can make

(Testimony of Lewis Michael Larson.)

some arrangement between you to let them examine it; and if there is anything that has any relation to the subject matter, they will have an opportunity to offer it.

Mr. Tinning: I offer in evidence the portion of the Sunset Tunnel Specifications No. 14646, of the Department of Public Works of the City and County of San Francisco, appearing on page 25—

Mr. Marrin: Is it dated on the outside, Mr. Tinning?

Mr. Tinning: September, 1922—appearing on page 25; which I have read, and which I will now read again:

“All sheet piling, lagging, bracing, shoring or timbers shall wherever practical be removed from the excavation except where the City Engineer shall expressly order the same to be left in place. All vacancies left by the removal of sheet piling, lagging, bracing, shoring of timbers shall be backfilled as herein specified. The contractor shall be responsible for any injury which may result to the work or any other structure by the removal of lagging and bracing.”

If it may be introduced in this manner, it is satisfactory.

The Court: Yes; it is in the record

Mr. Tinning: I understand there will be no number given to this because it is in the record.

(Testimony of Lewis Michael Larson.)

Mr. Marrin: Will you let us have it over the weekend, Mr. Tinning?

Mr. Tinning: Yes. [928]

Q. When you were preparing your estimate for a bid on the Claremont Tunnel did you have in mind a provision in the specifications which appeared as Sections 65, 66 and 67, specification for the Mokelumne River Project, Claremont Tunnel of the East Bay Municipal Utility District?

Mr. Smith: What is the date of that?

Mr. Tinning: Apparently there is no date. April 2, 1926 is the date that appears on the advertisement calling for bids:

"The tunnel shall in all cases, be excavated in such a manner and to such dimensions as will give suitable room for the necessary timbering, lining, ventilating, pumping and draining. The contractor shall use every reasonable precaution to avoid excavating beyond the outside lines of permanent timbering and beyond the outside neat concrete lining where timber is required. All drilling and blasting shall be carefully and skillfully done so as not to shatter the material outside the required lines. The contractor shall avoid blasting that might injure the work, or adjacent property, and any damage done by blasting shall be repaired by the contractor at his expense, and in a manner satisfactory to the engineer. Wherever the

(Testimony of Lewis Michael Larson.)

grade of the tunnel at the west portal is within 200 feet of the ground surface, the excavation shall be so performed as to disturb the residents as little as feasible. Blasting shall be done between the hours of 8 A. M. and 8 P. M. with light charges, subject to approval of the engineer. The tunnel will be paid for by the Linear foot at the price bid therefor under item 1, which shall include excavation, temporary and permanent timbering, backfilling and all work incidental to a completed tunnel, except that cement, reinforcing steel and concrete, exclusive of cement and reinforcing steel, will be paid for under the provisions of paragraphs 52, 53, and 63 respectively." [929]

It thus appears in this specification that I just read, Mr. Larson, that timbering was not something that was not to be paid for extra, as I believe you stated it was.

A. That is my recollection.

Q. This refreshes your mind that the price per foot was just as it was in the Broadway Tunnel, a lump sum?

A. Yes.

Q. "66. Timbering. Suitable timbering and lagging shall be used to support the tunnel sides and roof whenever necessary. If practicable, this timbering shall be removed before the construction of the concrete lining. Timbering left in place must be placed in such a

(Testimony of Lewis Michael Larson.)

manner as not to weaken the concrete lining and must be in accordance with designs approved by the engineer. Approved designs for such permanent timbering are shown on the drawings, but in case the designs are found to be inadequate, they may be modified from time to time, subject to the approval of the engineer. Lumber for timbering shall be furnished and placed by the contractor at his own expense. The cost of furnishing and placing timbering shall be included in the price bid per linear foot for excavating the tunnel. Nothing herein contained shall prevent the contractor from placing such temporary timbering as he may deem necessary for safety, or from using heavier timbering than that shown on the drawings, or shall be construed to relieve the contractor from sole and full responsibility for the safety of the tunnel and from damage to person and property."

Now, was there anything in those provisions of the specifications which I have just read to you, Sections 65 and 66, that caused you to believe that the material in the Claremont Tunnel would be self-supporting?

A. No, I must say this, Mr. Tinning, that there is no definite statement there in the specification that material would be self-supporting; there is an indication [930] that we may run into some of it

(Testimony of Lewis Michael Larson.)

that would be self-supporting but the provision that you have read departed in one particular from the Broadway Tunnel, in which, when the timber should be left in place it must meet the approval of the District, and that they would furnish plans for such timber rather than the specification—

Q. They would furnish the design?

A. The design, yes.

Q. And I believe they did, and you furnished a substitute design which they consented to?

A. That is true.

Q. And the specification provided that it might be put on the approved design? A. Yes.

Q. Isn't it a fact that in the Broadway Tunnel that the timbers could remain in with the approval of the District Engineer?

A. Yes, it had to have his approval.

Q. Isn't it a fact, Mr. Larson, that there is nowhere in this Broadway Tunnel specification that it says that the ground is self-sustaining? In your previous answer you said that there was nowhere in the Claremont Tunnel specification that it stated that; it is also true about these Broadway specifications?

A. I wish to say it this way, there is not in the Broadway specifications, as I remember, any direct statement that the ground will be self-supporting.

Q. I wanted to clear that up, because your previous answer indicated that might be your basis.

(Testimony of Lewis Michael Larson.)

All of the direct statements that you referred to as having caused you to believe that this ground would not require timbering in the majority of the material encountered come from the geological report, do they not?

A. Yes, directly and indirectly. It appears to me that was the conclusion of all the parties.

Q. Mr. Larson, I wish you would answer my question before you start explaining.

A. I thought I had. [931]

Q. I am talking about the geological report, and I ask you if it is not a fact that the only place that anything appears where there is a direct statement with respect to the material to be encountered is in the geological report?

A. Yes, the geological report is the only place where it states the ground will be self-supporting, but what I am trying to bring out is undoubtedly that same interpretation was put on it by all parties in order to bring out that specification, and it is because of that statement in the specifications that I was influenced to believe that everybody viewed it in the same light. That is why I tie the specification and the geological report together.

Q. You are now stating a conclusion, your conclusion, and we ask, if your Honor please, that the witness' answer go out because I asked him with respect to where there was a definite statement.

The Court: It may go out.

(Testimony of Lewis Michael Larson.)

Mr. Tinning: If your Honor please, we offer in evidence Sections 65 and 66 on behalf of the defendant from the specifications of the Mokelumne River Project, California, Claremont Tunnel, East Bay Municipal Utility District, upon which bids were opened May 14, 1926 in Oakland. I would like to read the sections into the record. May it be stipulated that the reporter can copy Sections 65 and 66?

Mr. Marrin: Yes.

(The Sections referred to are as follows):

"Section 65. Excavation. The tunnel shall in all cases, be excavated in such a manner and to such dimensions as will give suitable room for the necessary timbering, lining, ventilating, pumping and draining. The contractor shall use every reasonable precaution to avoid excavating beyond the outside lines of permanent timbering and beyond the outside neat concrete lining where timber is required. All drilling and blasting shall be [932] carefully and skillfully done so as not to shatter the material outside the required lines. The contractor shall avoid blasting that might injure the work, or adjacent property, and any damage done by blasting shall be repaired by the contractor at his expense, and in a manner satisfactory to the engineer. Wherever the grade of the tunnel at the west portal is within 200 feet of the

(Testimony of Lewis Michael Larson.)

ground surface, the excavation shall be so performed as to disturb the residents as little as feasible. Blasting shall be done between the hours of 8 A. M. and 8 P. M. with light charges, subject to approval of the engineer. The tunnel will be paid for by the linear foot at the price bid therefor under item 1, which shall include excavation, temporary and permanent timbering, backfilling and all work incidental to a completed tunnel, except that cement, reinforcing steel and concrete, exclusive of cement and reinforcing steel, will be paid for under the provisions of paragraphs 52, 53, and 63 respectively."

"Section 66. Timbering. Suitable timbering and lagging shall be used to support the tunnel sides and roof whenever necessary. If practicable, this timbering shall be removed before the construction of the concrete lining. Timbering left in place must be placed in such a manner as not to weaken the concrete lining and must be in accordance with designs approved by the engineer. Approved designs for such permanent timbering are shown on the drawings, but in case the designs are found to be inadequate, they may be modified from time to time, subject to the approval of the engineer. Lumber for timbering shall be furnished and placed by the contractor at his own expense.

(Testimony of Lewis Michael Larson.)

The cost of furnishing and placing timbering shall be included in the price bid per linear foot for excavating the tunnel. Nothing herein contained shall prevent the contractor from placing such temporary timbering as he may deem necessary [933] for safety, or from using heavier timbering than that shown on the drawings, or shall be construed to relieve the contractor from sole and full responsibility for the safety of the tunnel and from damage to person and property."

Mr. Alexander: You mentioned 67.

Mr. Tinning: I did not read that, I did not think it was necessary.

Q. You prepared an estimate on the Figueroa Tunnel, too, did you not? A. I did.

Q. I will read to you now from page 39 of the Figueroa Street Tunnel specification. I do not have the date of this document. I have a photostatic copy.

A. Are you speaking, Mr. Tinning, of the last Figueroa street tunnel, because there was an earlier one.

Q. I am speaking of the three tunnels.

A. The three tunnels.

Q. Those, I think, are the ones you referred to as the ones on which you prepared an estimate. Do you remember that when you prepared the estimate you read this provision of the specification:

(Testimony of Lewis Michael Larson.)

"If wood is employed for tunnel timbering it shall be sound Douglas Fir and no second hand lumber shall be used. So far as is practicable all wooden members of the timbering shall be removed before the concrete is poured. Where found necessary in the Engineer's opinion, timbering, or portions thereof, may be allowed to remain permanently in place, but, in no case will any wooden piece so remaining, be allowed to project into the concrete in the direction of the center of the tunnel beyond the extrados line as shown on Sheets 2 and 3 of the drawings. If structural steel shapes are used for the ribs of the tunnel sets they may be allowed to remain permanently in place and may project not to exceed eight (8) inches into the concrete beyond said extrados line in the direction of the center [934] of the tunnel."

As I understand the extrados line is the exterior of the neat concrete lining?

A. That is correct.

Q. Did you, in preparing your estimate for this bid you worked on have in mind this provision that I have just read to you from the Figueroa street specification?

A. I must say yes, because while I do not remember now what I might have done at that particular time, I read the specification and must have had that in mind.

(Testimony of Lewis Michael Larson.)

Q. Did you believe from reading that provision of the specification that the material to be encountered in the Figueroa street Tunnel would be self-supporting?

A. I would hardly think so, but at the present time I could not just remember what my thoughts were at that time.

Q. When you read the specification of the Broadway Low Level Tunnel you said that they caused you to believe that the material which you were to pass was to be self-supporting in the majority of the tunnel.

A. They helped me to believe it, yes.

Q. And because it said that the wood timbering should be removed, if it could be, you assumed that there would be a large part of the tunnel which would not require support?

A. Not alone from the specification, Mr. Tinning.

Q. The specification was part of the thing upon which you based your judgment, was it not?

A. That, coupled with the geological report.

Q. This was one of the indirect things then in the specifications in distinction to the direct statement you claim in the geological report which led you to believe that the ground would be self-supporting throughout the larger part of the tunnel?

A. It helped strengthen my belief to that extent.

[935]

Q. Your belief was based on these specifications and upon the geological report?

(Testimony of Lewis Michael Larson.)

A. That is correct.

Q. And you knew in the Broadway Tunnel, and you knew in the Figueroa Tunnel, and in the Claremont Tunnel, and in the Sunset Tunnel, and in all tunnels of this type, that it was in the power of the engineer to have the timber removed if it was practical to do so?

A. In general I believe that is correct.

Q. And the practice in general was also followed in the Broadway specification, was it not?

A. Probably, yes.

Q. Mr. Larson, following your work in connection with the preparation of the estimate for the tunnels you went away and were mining for some time?

A. Yes, after the 30th of April.

Q. You prepared a bid—

Mr. Smith: Just a minute now, I think the witness misunderstood the question. You say that following his preparation of the estimate he went away mining. He did not.

A. No, I did not.

Mr. Tinning: I was trying to bring in the historical set-up. You were employed in and about the work until April 30, 1935, and then you came back in September, or the 29th of August, and remained there until about the 1st of December, and then you were away from the tunnel for some time following that date?

A. That is approximately correct.

Q. And you visited the tunnels again, as I understand it, sometime in August or September of 1936, after the Six Companies had quit?

(Testimony of Lewis Michael Larson.)

A. I did visit it after the Six Companies had quit.

Q. And at that time you have already testified you were preparing an estimate for a bid on the completion of the tunnel? A. That is a fact.

Q. Did you call upon Mr. Wallace B. Boggs, District Engineer of the District, on the 26th of August, 1936, to discuss the work [936] that remained to be done?

A. I remember calling upon him but I do not remember the date.

Q. The purpose of your call was to discuss the work, was it not?

A. That was the purpose of the call.

Q. And in the conversation that you had with him you told him that you were preparing a bid for some undisclosed contractor?

A. I believe I did not state who the contractor was—

Q. Even though at that time—

A. Pardon me, might I finish my answer—because I had to be clear in my answer—are you speaking now of the first call for bids after the Six Companies quit, or the second?

Q. I do not know whether you called on Mr. Boggs later, but the time I am referring to is the occasion when you called at his office at 1448 Webster street, the District Office, and saw him, and to refresh your memory further, do you remember that while you were with Mr. Boggs, shortly after you started to talk to him, that Mr. A. Kempkey,

(Testimony of Lewis Michael Larson.)

one of the District Consulting Engineers, came into the room?

A. I think that was on the second call for bids, as I recall it.

Q. According to the District records it was the 26th of August, 1936, and that was before the bids were received, and it was the time that examination was being made of the District work to be done, in the completion, by a number of contractors; that is the date of the conversation which I refer to, and it was on the afternoon of August 26, 1936, Mr. Larson.

A. In that event, I think I had no direct association with the contractor, at that stage of the game; that is my recollection now.

Q. And on that date you made a deposit and secured a set of plans and specifications?

A. I did make a deposit and secured a set of plans. I don't remember the date. [937]

Q. You said that you were preparing an estimate for a bid for some unknown contractor, or for some contractor, and you did not name him—I do not mean you used the term “unknown contractor.”

A. I do not know whether I specified I was doing it for a contractor or in anticipation of having a contractor.

Q. In that conversation it is a fact, as you stated to Mr. Boggs, that you thought the Six Companies' greatest trouble on the job was too many bosses?

(Testimony of Lewis Michael Larson.)

A. I don't remember that conversation.

Q. You don't remember that statement?

A. I do not.

Q. You remember that a conversation occurred that day?

A. I remember that I had a conversation with Mr. Boggs then and subsequently, but I do not remember any such a conversation.

Q. And that apparently Board Meetings had to be had to settle on any matters of method and equipment to be used in the tunnel?

A. I believe that is a misstatement.

Q. You don't remember such a statement?

A. I don't remember any such remarks.

Q. And that those Board Meetings of Six Companies' people usually developed much difference of opinion as to methods and equipment to be used?

A. I would not know that.

Q. You did not make that statement?

A. I believe I did not make that statement; to the best of my recollection I did not make that statement.

Q. And did you at that time in that conversation with Mr. Boggs, state that the termination of your work with the Six Companies on April 30, 1936, was due to your own disapproval of the methods which you were then required to follow in doing the work in the tunnel?

A. I do not think so, because it would be an untrue statement.

(Testimony of Lewis Michael Larson.)

Q. You did not make that statement?

A. I do not believe I did.

Q. You believe you did not?

A. I believe I did not. [938]

Q. Did you further state in the presence of the people mentioned at the time stated that you never considered that you had been deceived as to ground conditions by representations made in the geological report or the specifications?

A. I am reasonably confident I made no such statement, because that has never been my thought.

Q. Did you then state that the caves-in were unnecessary and avoidable?

A. I believe I did not.

Q. Did you at that time and place state in discussing the preparation of your estimate made for a bid, for use by the Six Companies, that it had been reduced about \$200,000 by Mr. Steve Bechtel?

A. I did not make the statement in that way. I know that the matter had been discussed at various times, but I did not state that the estimate was reduced. I may have admitted that there were differences of opinion as to the bid amount.

Q. Did you state at that time and place that the amount that you had estimated for the tunnel work, the estimate that you prepared in 1934 had been reduced \$200,000 or thereabouts by Mr. Steve Bechtel, in making the bid?

A. I have no recollection that I made any such statement.

(Testimony of Lewis Michael Larson.)

Q. Did the bid reduce your estimate?

A. I have never made a page by page comparison at the present time, but I believe that the bid did not, that is, I believe that the estimate was not materially reduced. That is my present belief.

Q. Did you also in that conversation state in respect to the estimate that you had made that you had also made an estimate of the Fort Peck Tunnel for some of the Six Companies group?

A. I can't remember whether I made that statement or not.

Q. And much lower figures were received from other bidders so that you had the reputation with Mr. Steve Bechtel at least of [1939] being a high estimator?

A. I believe not. I am not inclined to boast.

Q. You then state that you did not make such a statement? A. I am positive I did not.

Q. Did you state at that time and place that in the preparation of the estimates of the Six Companies in 1934 upon which this contract was let, that two other units of Six Companies prepared estimates for discussion amongst themselves, one being the Utah Construction Company and that those estimates were higher than the figure used for the actual bid?

A. I do not remember having made that statement, but it is a fact that the Utah Construction estimate was higher than my estimate.

(Testimony of Lewis Michael Larson.)

Q. And at that time when you were discussing this matter about the reduction by Mr. Bechtel, you state you do not recall that?

A. I do not remember that. I doubt very much whether I made any such statement.

Q. At the time that you had this discussion with Mr. Boggs and Mr. Kempkey did you then state in their presence that Mr. Bechtel had reduced your estimate of the cost of the tunnel work in the figures that he submitted in Six Companies' bid for doing the tunnel work?

A. I could not have made that statement, and do not believe I made the statement, because I did not know until the day before yesterday what the true facts were. I doubt that I made that statement.

Q. You doubt it? A. Yes.

Q. Did you at the time that the bid of the Six Companies was being prepared protest that your estimate was cut or reduced by the figure which was submitted as a bid on the tunnel job?

A. Not as you state it.

Q. What did you do?

A. I discussed with other members of the group [940] the amount that was offered as a bid price. It was my thought that the price should be raised.

Q. Did you state to Mr. Boggs and to Mr. Kempkey on August 26, 1936, that at the time that Mr. Bechtel told you he was going to reduce his bid figures for the tunnel work below the amount of

(Testimony of Lewis Michael Larson.)

your estimate—did you also state to them when you had protested and objected that Mr. Bechtel had said to you that you had done the job and that he, Mr. Bechtel, and the remaining members of the Six Companies group were going to make the bid?

A. I made no such statement, not as you are stating it.

Q. Did you at the time and place mentioned, August 26, 1936, state to the persons present that you and Mr. Fontaine were in close agreement, and that Mr. Bechtel tried to get Mr. Fontaine to take a financial interest in the job, but that he had refused and was thereafter replaced by Mr. Price?

A. I doubt that very much—pardon me, might I explain? I want to make this thing clear, that I did not know what Mr. Fontaine's position was with regard to the Bechtel people, and, furthermore, the implication there is, as I understand it, that Mr. Fontaine was relieved from the position because he would not become an interested member. That is far from the fact.

Q. I am asking you if you made that statement.

A. I did not make any such statement.

Q. Did you at that time state that the Bechtels were hot for their job and that it was generally talked among Six Companies' employees that the rest of the group had decided to give them a lesson in contracting?

A. I have no recollection of that remark.

(Testimony of Lewis Michael Larson.)

Q. Did you at that time and place state that the Shea Company apparently were little interested in the work at the time you left the job?

A. I have no recollection of making any such remark. [941]

Q. Now, as I understand your position with respect to this matter the geological report was ignored by you except as to the general conditions appearing at the end of the report.

A. That was the controlling factor.

Q. In other words, you took the general conditions and interpreted them as you have stated at length, and wholly ignored the other matters and details, discussions and predictions of material to be encountered that appeared in the earlier pages of the portion of the report that you had?

A. Yes, in so far as those general provisions gave a definition to the generalities that preceded it.

Q. When you were preparing your estimate in this matter you had in mind all of the provisions of paragraph (e) of Section 32 of these specifications for the Broadway Tunnel?

Mr. Smith: What page is that?

Mr. Tinning: Page 60—

Q. Is that correct, all of the provisions of the Timbering Section?

A. Unquestionably I had.

Q. You also had in mind, did you not, that payments for the work in the tunnel, Broadway Tunnel, would be on the same basis as it was in the Clare-

(Testimony of Lewis Michael Larson.)

mont Tunnel, except that the contractor here would be required to furnish all material, while in the Claremont Tunnel I believe the concrete was furnished by the owner. You remember that, do you not?

A. I do not remember the details of the Claremont, consequently I could not couple the two together, but I did understand that in the Broadway Tunnel that the timbering would have to be placed at the expense of the contractor.

Q. And that under paragraph 20 of Section 32, which appears upon page 63 of the specifications, it was provided that "The prices bid per lineal foot for tunnel construction of the various sec- [942] tions and of cross adits shall constitute full compensation for all excavation; the removing, transporting and depositing of materials, as herein provided, timbering, drilling, blasting, draining, ventilation, timber and removal, structural steel supports and removal, and all concrete work as shown in the plans, including all concrete placed outside the neat lines of the concrete structure, and all grouting"; by that term "grouting" is meant concrete between the timbers and the material that fills the overbreak which is not filled by timber or lagging—"for all materials furnished and the transporting and placing of all materials." I do not think it is necessary to read further, because that deals with other portions of the work. Now, you had that in mind when you were preparing your estimates?

(Testimony of Lewis Michael Larson.)

A. I did.

Q. As well as the provisions of the timbering section?

A. I did.

Q. And those provisions of the timbering section provided that where the District Engineer authorized you to do so, or with his consent, that the timber could be permitted to remain permanently?

A. I do not quite couple that. I thought you were making a statement rather than asking a question. I ask that it be read over again.

Q. Perhaps I had better restate it, your suggestion is probably good. You had in mind as well as the fact that the contractor had to furnish all the material as provided by paragraph 20 of Section 32, which appears on page 63, that also if it was impracticable to remove the timbers or for other reasons it was necessary to leave them in, they would be left in with the consent of the District Engineer?

A. Yes.

Q. You knew that?

A. I did.

Q. And then, knowing that, you considered because it stated that it was practicable, or it was the general intent to remove the [943] timbering, you coupled that with the other provision of the specifications and concluded that there was material in the tunnel which would be self-supporting in the majority of the area penetrated?

A. I did in this way, that it seemed to reflect the thought of the geology report.

(Testimony of Lewis Michael Larson.)

The Court: We will take a recess for a few minutes. [944]

(After Recess)

Mr. Tinning: Take the witness, gentlemen; no further cross-examination.

Redirect Examination

Mr. Marrin: Q. Mr. Larson, you testified you were employed on February 27th of 1934, and you then started estimating, and the bid was submitted on May 22, 1934. How much time, between those two dates, of your time was put in in making this estimate?

A. Very nearly two months; and a good portion of that time,—at least, the first three weeks,—were at least 16 hour days. I worked as long as I could until the requirement for rest forced me to bed.

Q. When you went to Fort Peck, did Mr. Orselli go with you? A. He did.

Q. Did Mr. Orselli make any changes in your estimate without first consulting you?

A. I am sure he did not.

Q. Did you do any work on the estimate after May 15, 1934?

A. It is possible that I did; but I did not enter anything into it; but I believe, as I recall it now, Mr. Marrin, I was advised, when persons and the quotations came in on material, as to what those quotations were; but I entered nothing, as I recall it now, myself, in that estimate after May 15th.

(Testimony of Lewis Michael Larson.)

Q. But you were in consultation with respect to it up to the time the bid went in?

A. Yes; but not so direct as I had been up to May 15th.

Q. On your cross-examination, you have testified as follows, as page 303 of the transcript:

“Q. You say, now, you think you were employed about the 15th of September. Weren’t you employed immediately following the slide?”

“A. I was employed by the legal department.

“Q. You were employed by the legal department? A. Yes. [945]

“Q. That is the legal department of the plaintiff Six Companies?”

“A. As I understand it.”

As a matter of fact, who communicated with you and employed you at that time, Mr. Larson?

A. Mr. Steve Bechtel called me and asked me to meet him in his office on August 28th; and, on August 29th, called me and asked me to meet him up at the tunnel; and, when I arrived at the tunnel then, Mr. Delancey Smith asked me to make observations in the tunnel and to attend a meeting that was then in progress, or about to be called, by Mr. Reardon. I made this error the other day, unintentionally; I had in mind a member of the present legal department.

Q. So, you were employed by Mr. Bechtel?

(Testimony of Lewis Michael Larson.)

A. I was employed by Mr. Bechtel.

Q. You testified, on your cross-examination, that you made an estimate of the amount of the bid which should be submitted for completing the project after the Six Companies of California stopped work. Do you recall the amount of that estimate which you made?

Mr. Wittschen: We object to that as immaterial and not proper redirect examination. The bid to complete the work would not tend to show what damage was sustained or any right to rescind the contract, and was made after they walked off the job.

Mr. Marrin: If the Court please, the defendants, themselves, opened the matter up on cross-examination. They proved that Mr. Larson, having made that estimate, it was turned over to the George Pollack Company, and they have used it as the basis for their bid. We did not open the matter up on direct examination, but they opened it up on cross-examination.

Mr. Wittschen: The fundamental rule, about offering a matter on cross-examination which is immaterial and which may test the witness, ends with the cross-examination. It does not permit, on [946] redirect, to go into it and spin out that immaterial matter.

The Court: For the purpose of the record, indicate what you are offering this for; upon what ground.

(Testimony of Lewis Michael Larson.)

Mr. Marrin: We desire to show that the amount of the bid of George Pollack Company was based on Mr. Larson's estimate, and was substantially the same amount.

Mr. Wittschen: The fact he made a bid for another contractor, thereafter, to complete the tunnel, after this contractor moved off, is wholly immaterial to this controversy, and is not proper re-direct.

The Court: I cannot see the materiality of it.

Mr. Marrin: Well, it is only material, your Honor, as developing the facts in a matter which was brought about by the defendant's cross examination.

Mr. Smith: Also the accuracy and character of the estimating ability of the witness is drawn into this by the attempted cross-examination of the subject matter; and this would show, if proven, that the witness's estimate was accurate,—estimated it in good faith, for another contractor, at a later date; thereby, reestablishing the credibility of his former estimate.

Mr. Wittschen: I will ask the Court the question: Are we bound by what other contractors do?

Mr. Marrin: You opened the matter up.

Mr. Wittschen: We had a right to, on cross-examination.

The Court: The Court will sustain the objection.

Mr. Marrin: Exception.

(Testimony of Lewis Michael Larson.)

Mr. Alexander: We join in the exception, your Honor.

Mr. Marrin: Q. At page 319 of the transcript, you testified, with respect to the Bayshore Tunnel constructed for the Southern Pacific Company, as follows: [947]

"Q. Yes.

A. We had this earthquake, that we might have celebrated yesterday, during the period of that work; and after the earthquake, it seemed very heavy pressures came on the tunnel. It had been registered during the period when we were shut down; and immediately following the earthquake, the minute we began to work the ground, the timbers began to take terrific pressure, and we had to have the core to give support on that account; otherwise, it might have stood without support.

"Q. Well, there was a considerable period, then, after you got some of your excavating done, your timbers in, when you were delayed in construction due to the interruption of the earthquake, and pressure came on those timbers during that period?

"A. I think the result of the shake caused it, and may have been immediate but it did not register until we began to move the timbers.

"Q. How long was it after the earthquake before you resumed work in the tunnel?

"A. My recollection was about 10 days.

(Testimony of Lewis Michael Larson.)

"Q. It was not a very long period?

"A. No."

Was there any other delay to that work caused by the earthquake, than the 10-day period in which the work was shut down?

A. Yes; in this way: that retimbering and giving support to a structure like a tunnel, brings into the tunnel such a large group of men, and the necessity for transportation of materials like timber, brick and cement, that had to be rushed in to meet that emergency,—that automatically slowed down the driving of the drifts, though only to a limited extent; the drift driving was continuous, but handicapped, in a measure, by other operations.

Q. It did slow down the balance of the work?

A. For a distance, only; possibly for a period of three weeks, as I recall it now.

Q. You testified, Mr. Larson, on cross-examination, that the [948] timbering was removed from the Hollywood Tunnel. The Hollywood Tunnel is in Los Angeles, is it not?

A. It is.

Q. And that the ground was not self-supporting in that tunnel?

A. No; it was not.

Q. You have also testified that you contemplated the removal of the timbers when you made your estimate for constructing the Broadway Tunnel?

A. Yes.

Q. Was the method of removing the timbers, which you contemplated in making your estimate

(Testimony of Lewis Michael Larson.)

for the Broadway Tunnel, the same method that was used in connection with the construction of the Hollywood Tunnel?

A. There was a difference, in this way: that, in the Hollywood Tunnel, we excavated by the full drift system, and left the core in, which required our having wooden forms; in the Broadway Tunnel, it was contemplated to use steel forms; and, in the use of the core as a support to our wooden forms, it made it possible to carry a greater weight on our forms than would be practicable or feasible on steel forms; and in the cherts section and in the Orindan section, it was contemplated to leave the spiling in, to prevent falling of rocks, falling on the workmen below, not with a thought that it would be necessary to carry any of the support of the structure onto the concrete forms.

Q. If you had contemplated removing the timbers in the Broadway Tunnel, in the same manner that you removed them in the Hollywood Tunnel, would it have increased your estimate of cost?

A. Very materially, in that section, or any section that was not self-supporting.

Q. Could you state how much it would have increased your estimate of cost?

A. That would be largely a rough guess, Mr. Marrin; but I would say, in view of the information I have, that it would have cost at least a million dollars more, and probably extended [949] the time period many months. I would have to really estimate

(Testimony of Lewis Michael Larson.)

that to give an answer that is anywhere near definite.

Q. You testified, in connection with the Figueroa Street Tunnels, that the steel supports were left in. Do you know, now, whether that was a requirement of the contract or not they be left in?

A. Let me get this clearly. Do you mean the steel supports that carried the lagging and the forms?

Q. Well, the steel supports concerning which you—— You testified that the steel supports were left in?

A. Yes; those were pipes loaded with concrete that we carried down to the forms. There was no requirement that they be removed or left in. The Pacific Electric people permitted us to use our own judgment and did not disapprove of the method.

Q. You also testified, in connection with the Yerba Buena Tunnel, that there were certain steel beams crossing over, from, I believe, about the spring line of the arch, which were left in. Were those a part of the design of that tunnel?

A. Yes.

Q. And they were required to be placed?

A. Required to be placed.

Q. Regardless of the type of the ground?

A. Yes.

Q. Did that tunnel have a wide arch?

A. A very wide and a very flat arch; that is, I say "very"—I mean, by that, in a comparable sec-

(Testimony of Lewis Michael Larson.)

tion. I have been thinking, since I stated "58,"—that being the width of the tunnel,—I may have been very much short of that; it may have been 78 feet.

Q. Would that make the support more difficult?

A. Yes. As your span increases, your difficulties increase, unless your ground is of a structure where it is entirely safe and self-supporting.

Q. Referring to Defendant's Exhibit "B," on your cross-examination you were asked a number of questions concerning your knowledge of the various tunnels which are shown thereon, and your knowledge of [950] the ground conditions of those tunnels. Would the character of the ground, in those tunnels other than the Broadway Tunnel, enable you to determine what character of ground it would be in the Broadway Tunnel?

A. I can see very little relationship between them, because, even in one tunnel, ground changes sometimes from side to side, or a few feet in advance it might be different than a few feet back. The only thought that would be useful in the use of other tunnels would be if you did not have a definite statement from a geologist that this particular tunnel, like the Broadway Tunnel, probably was of a positive character; that eliminates any other tunnel from the discussion.

Q. For instance, where you have a tunnel such as No. 2 shown on this exhibit, which is several miles from the Broadway Tunnel, I take it the fact

(Testimony of Lewis Michael Larson.)

the ground is of certain character in Tunnel No. 2 would not indicate the character of the ground in the Broadway Tunnel?

A. No. I don't see the relationship there. Coming back to your statement there: it is my belief that lava may not have been encountered in the tunnel that you mention; it was encountered in the Claremont, and was not expected; and was not encountered, I believe, in the Broadway Tunnel. You see, you have three tunnels there, where possibly the conditions were different. I know it was different in the Broadway Tunnel than the Claremont Tunnel, from the information that I have; and I know of a lava having been encountered in the Railway Tunnel that lies to the south.

Q. The formations encountered in the Claremont Tunnel,—which is the closest tunnel to the Broadway Tunnel,—were, to a great extent, considerably different than those in the Broadway Tunnel, were they not?

A. There were only two comparable materials: those were the cherts and the Orindan. I know of no Monterey [951] sandstone in the Claremont Tunnel. I know that there was not any, anticipated by the geological report, of Chico sandstones, or lava, in the Broadway Tunnel. Therefore, there could be no comparison. The only comparable ones would be the cherts and the Orindan.

Q. Were you in charge of all of the work of excavating in the Claremont Tunnel?

(Testimony of Lewis Michael Larson.)

A. No; I was not. I had charge of, as I recall it, now, about 12,400 or 12,600 feet from the west end in the excavation and the lining of that portion of the tunnel. The eastern 5,000 or possibly 6,000 feet, —I don't recall the distance now,—was done by another superintendent or other superintendents. Later on, I came into that portion of the tunnel to do some additional work that was required.

Q. Calling your attention to the accident which happened on Thanksgiving Day, when the water rushed into the Claremont Tunnel: at which end of the Claremont Tunnel did that water enter?

A. That came in from the east end, from the Orindan creep.

Q. Did you have charge of that portion of the work at the time?

A. No; I did not. In fact, the place where the water came in was under the control of another contractor.

Mr. Wittschen: Mr. Marrin, that was not intended to reflect upon Mr. Larson.

Mr. Marrin: Well, the testimony was brought in, in such a way—

Mr. Tinning: The purpose of that was related to the hazards and so on; that was not any reflection on Mr. Larson.

Mr. Wittschen: In fact, it came in through the Lafayette Tunnel and went on through,—with which he had nothing to do.

(Testimony of Lewis Michael Larson.)

Mr. Marrin: Q. Mr. Larson, referring to Plaintiff's Exhibit 22,—which is the geological map prepared by Professor Louderback,—you have testified that the only part of this report which was before [952] you, at the time you made your bid, was pages 13 to 19, inclusive. Since that time, have you read the balance of the geological report which covers pages 1 to 12, inclusive? A. I have.

Q. Do pages 1 to 12, inclusive, deal with the tunnel?

A. Not to my recollection. I think that deals with the approach work.

Q. It deals with the outside highway geology?

A. Yes; also the last page,—page 19 of that report,—as I recall it, deals with the outside work, at the east end.

Mr. Wittschen: There is no contention made otherwise, except in the first paragraph.

Mr. Marrin: With the exception of possibly the first paragraph?

Mr. Tinning: That was all that was referred to; and the only purpose of that was to establish the fact certain diagrams were referred to in that paragraph.

Mr. Marrin: I just want to make it clear that this part he did not have before him did not refer to the tunnel geology.

Mr. Tinning: But it referred to the diagram. Page 1 referred to the other diagrams that were

(Testimony of Lewis Michael Larson.)

attached to the report which he did not see. That was the purpose of introducing that matter.

Mr. Marrin: Q. Mr. Larson, referring, further, to Plaintiff's Exhibit 22, on your cross-examination you testified that you did not see, prior to bidding, the blueprint which is attached to that exhibit and which is marked "Plan and Profile of Tunnel Approved by George A. Posey, dated May, 1932"; but that you did have before you a tracing from the profile which is dated July 7, 1930; drawing your attention to the westerly portion of the blueprint and the profile, and to the point marked on there "Stream Terrace," on the profile, and to the point marked "Overburden, Stream Deposit and Hill Wash in Creep," on the blueprint, will you state how much further [953] in feet the overburden or stream deposit and hill wash and creep is shown on the blueprint as extending easterly into the hill on the blueprint than it is on the profile?

A. Approximately 110 feet further.

Q. 110 feet further, on the blueprint, than it is on the profile?

Mr. Tinning: Does that refer to the top or bottom?

Mr. Marrin: Where it intersects the tunnel line.

Mr. Wittschen: Turn over that blueprint. You mean the top or bottom,—referring to this point or to some immediate point?

Mr. Marrin: Well, he states the point, where it apparently intersects the top of the tunnel, lies—

(Testimony of Lewis Michael Larson.)

The Court: Well, I think he said about 110 feet. Where is the 110 feet?

Mr. Marrin: I am trying to get that clearly, your Honor.

The Witness: A. The point on which I am speaking is the intersection of the indicated top of the tunnel with the stream terrace; that is at this point here, as against——

Mr. Tinning: Q. That is the diagram, July 7, 1930?

A. Yes—That would be about Station 111 plus pretty close to 70 or 75. 75 is close enough for an approximation.

Mr. Marrin: Q. In other words, where the stream wash is shown on the profile of July 7, 1930, as intersecting the top of the tunnel, is at Station, approximately, 111 plus 70?

The Court: Indicate that on there.

The Witness: A. 111 plus—it would be plus 75—plus 70; that would be about—just about where I have my pencil.

Mr. Marrin: Q. On the blueprint, which is dated——

Mr. Tinning: May, 1932.

Mr. Marrin: —May, 1932, the stream wash is shown as intersecting the top of the tunnel, at approximately Station 112 plus 90? [954]

A. Possibly about 85; plus 85.

Q. 111——

A. It would be a difference of about 110 feet.

(Testimony of Lewis Michael Larson.)

Mr. Wittschen: Q. The intersection of the top of the tunnel; but not how far the material may extend further east?

A. No. I just had in mind the number. [955]

Q. If you had had that blueprint before you would it have made any difference in your estimate?

Mr. Wittschen: Objected to as not proper re-direct examination, and immaterial, irrelevant, and incompetent, the fact that he did not have it. He is asking him now——

Mr. Marrin: He is entitled to express an opinion.

Mr. Wittschen: Wait a minute until I finish. He is asking him now to state what his opinion would have been on something that he did not see some three or four years ago.

The Court: Is it conceded that there was an absence of the blueprint?

Mr. Wittschen: He did not see it.

The Court: What is that in answer to? I am trying to get the reason for this.

Mr. Marrin: On cross-examination they emphasized the fact that Mr. Larson did not see the blueprint and there appears to be some slight difference between the location of the hill wash on that and upon the profile which he did see, and I am asking him whether if he had seen the blueprint it would have made any difference in the amount of his estimate for the construction work?

(Testimony of Lewis Michael Larson.)

Mr. Wittschen: That is not quite the whole story.

The Court: What is the legal application of it in reference to his failure to see the blueprint? I am trying to reach the problem.

Mr. Marrin: I am trying to show whether the fact that he did not see the blueprint would have made any difference to him in making the estimate. I am asking him that question.

The Court: I will allow it if there is any point in it. What is it in answer to, what is the merit of it? What is the legal phase of this matter that we are discussing? [956]

Mr. Wittschen: We could not possibly be charged with his failure to look at the blueprint.

The Court: That is what I am trying to analyze in my own mind.

Mr. Marrin: I am not trying to charge them with it, but he did see the profile, which is substantially the same as the blueprint.

The Court: I will allow it if there is any point.

Mr. Wittschen: Note an exception.

A. There would have been substantially no change in the estimate.

Mr. Marrin: Q. Now, Mr. Larson, I am referring to page 438 of the transcript, where the following appears. I am reading from the transcript:

"Mr. Tinning: Q. In other words, your conclusion from an inspection of the site was

(Testimony of Lewis Michael Larson.)

borne out by what you found when you excavated?

A. Well, I will have to go back to a statement that I made earlier, we found nothing in my examination of the ground which seemed to conflict with the conclusions that Dr. Louderback drew in his report.

“Q. That is not an answer to my question, Mr. Larson. I asked you if you found when you excavated anything different from your conclusions drawn from your observation of the site. I am not asking about the report.

A. Very little difference, only one of degree, probably I should say this, I found a mud that I did not expect to find in the south tunnel.”

To what portion of the tunnel did your answer to that question relate?

A. To the first forty feet.

Q. Was it confined to the first forty feet of the tunnel?

A. That was the purpose of my answer, to confine it to that.

Q. Mr. Larson, I am now referring to Defendant's Exhibit F, which is a letter from C. H. Fry to T. M. Price, which reads as follows—

The Court: Identify it. [957]

Mr. Marrin: It is Defendant's Exhibit F.

The Court: I know, but the parties, who were they?

(Testimony of Lewis Michael Larson.)

Mr. Marrin: It is a letter from C. H. Fry, Superintendent of Safety of the Industrial Accident Commission, to T. M. Price.

The Court: Oh, yes.

Mr. Marrin: "Mr. T. M. Price, Six Companies of California, P. O. Box 120, Berkeley, California.

"Dear Mr. Price:

"On April 15, 1935, F. L. Lowell, our Supervising Mining Engineer, before leaving for a trip to Mariposa County, called my attention to the conditions in your two lower Broadway Tunnels. I am enclosing a copy of his memorandum.

"You realize that it is the duty of the employer to take whatever steps are necessary to make its place of employment safe, and it is not the duty of the Industrial Accident Commission to do that.

"For some time before the Six Companies bid on this project, we conferred with Mr. Larson and Mr. Fontaine and called to their attention the type of formation through which this tunnel was to be driven, and that the ground would be particularly bad, and that we were quite sure methane gas would be encountered. As we all know, the ground has been particularly bad from the start of the work.

"Although I have not visited this project for some time, the information which I have re-

(Testimony of Lewis Michael Larson.)

ceived from various sources, makes me doubt the advisability of the type of excavating which is being done in the down-grade or north tunnel.

"This matter should be given your serious consideration, and every means known should be taken to prevent this ground from caving or running up in any way, causing conditions which would intro- [958] duce the possibility of personal injury."

Now, directing your attention specifically to this statement, "For some time before the Six Companies bid on this project, we conferred with Mr. Larson and Mr. Fontaine and called to their attention the type of formation through which this tunnel was to be driven, and that the ground would be particularly bad," I will ask you did Mr. Fry ever make the statement to you that the ground, that is, did he make a statement to you prior to the bid that the ground through which the tunnels would be driven would be particularly bad?

A. He did not. We did not approach Mr. Fry with a view to getting his opinion on that ground, realizing that he was incompetent. What we were after was to find out what the rules were that would be enforced regarding safety, on account of gas formations, and we went into that very thoroughly, and he elaborated very considerably on what might happen. But I have no recollection, and I am very

(Testimony of Lewis Michael Larson.)

positive that we did not discuss the ground conditions. He was not competent; we would not go to a person that we considered incompetent and discuss those things, in view of the fact that we had a very competent geological report waiting for our inspection.

Q. What you discussed with Mr. Fry then was the gas condition and not the ground condition?

A. Entirely, as far as I know, as far as I can remember.

Q. Mr. Larson, you were asked just before the recess about certain conversations had with Mr. Boggs and I believe it was in August or September, 1936. Was Mr. Kempkey present at those conversations?

A. Not while I was talking with Mr. Boggs.

Q. You do not recall him being present at all?

A. Mr. Boggs later on took me into Mr. Kempkey's office and introduced me to Mr. Kempkey.

Q. Was anyone other than Mr. Boggs present while you were talking [959] to Mr. Boggs?

A. I have no remembrance of anyone else being present.

Mr. Marrin: If your Honor please, there have been introduced here on cross-examination a number of specifications which we will not have the opportunity to examine until over the week-end. It is possible we may want to recall this witness for some questions on redirect examination after we examine those specifications.

(Testimony of Lewis Michael Larson.)

The Court: Very well.

Mr. Marrin: That is all.

Recross Examination

Mr. Tinning: Q. Mr. Larson, do you know of any tunnel through which a full faced driving operation has been used in the San Francisco Bay Region? A. No, I do not.

Q. There has not been one built that way?

A. I would not say there has not been, but I do not know of any.

Q. You do not know of any? A. No.

Q. Do you know of any tunnel in Los Angeles where there has been a full faced driving operation?

A. I know one that was attempted.

Q. And failed? A. And failed.

Q. That was the one where you said fear by psychology entered into it?

A. I do not know whether I expressed myself in regard to that particular tunnel, but this tunnel, a very wide one, the width of a street——

Q. What tunnel was that?

A. That was the Second Street Tunnel, which was driven by Mr. Hill.

Q. And it failed?

A. Well, he failed to continue.

Q. Driving full-faced?

A. Driving full faced.

Q. So the tunnel was not driven full-faced?

A. No.

(Testimony of Lewis Michael Larson.)

Q. In the Second Street Tunnel they started to drive it full-face [960] and they failed?

A. That is my understanding.

Q. That is what you said? A. Yes.

Q. So that you know of no tunnel in the Coast Range Mountains that was driven by a full-faced operation?

A. Let me get this straight. You are referring to the immediate vicinity, say from Stockton this way?

Q. In the Coast Range; I am not going into the granite of the Sierras. We are talking about the Coast Range.

A. There is none that I know of.

Mr. Tinning: That is all.

Mr. Marrin: No further questions.

The Court: We will take a recess now until two o'clock.

(A recess was here taken until two o'clock p. m.)

[961]

Afternoon Session

2:00 o'clock.

Mr. Marrin: I overlooked a fact before luncheon, that there is a little confusion in identifying a couple of photographs that went in yesterday, and I would like to recall Mr. Larson.

L. M. LARSON,

Recalled.

Mr. Marrin: Q. Mr. Larson, I call your attention to Defendant's Exhibit L. You stated yesterday that that was poured by the use of buggies. Do you wish to change your testimony in that respect?

A. Since then I have observed that the designation refers to the fact this was the north tunnel instead of the south tunnel, as I believe I was asked, I believe the transcript states that it was the south one, in which event I would change the testimony and say that it was poured by the Hackley gun instead of buggies.

Q. I draw your attention to Exhibit M, which you stated was poured with the Hackley gun. Do you want to change your testimony in any respect?

A. I do. This was poured by the buggy method.

STEPHEN DAVIDSON BECHTEL,

called for the Plaintiff. Sworn.

Mr. Marrin: Q. Where do you live, Mr. Bechtel?

A. 244 Lakeside Drive, Oakland, California.

Q. What is your present business?

A. Contractor.

Q. Did you employ Mr. L. M. Larson in February, 1934? A. I did.

Q. For whom did you employ him?

(Testimony of Stephen Davidson Bechtel.)

A. W. A. Bechtel Company and Henry J. Kaiser Company.

Q. For anyone else?

A. And four associates with whom we planned or had talked of considering the Broadway Tunnel project.

Q. Who were those associates?

A. The Utah Construction Company, [1962] McDonald & Kahn Co., Ltd., Morrison Knudsen Company and J. F. Shea Company.

Q. For what purpose did you employ Mr. Larson?

A. To investigate the job and prepare an estimate for the tunnel portion of same.

Q. What job are you referring to?

A. The Broadway Low Level Tunnel Project.

Q. For the defendant Joint Highway District No. 13?

A. Yes.

Q. What instructions did you give Mr. Larson?

A. To thoroughly investigate the job, plan the method of construction, and make an estimate for the construction of the tunnel portion of the job.

Q. What was done thereafter in preparing an estimate and bid for the project?

A. Mr. Larson came to our San Francisco office, proceeded to investigate, study, plan and estimate the job. I assigned A. L. Orselli to assist him as an assistant clerk, engineer estimator, and Larson proceeded with the investigation, planning and estimating of the job.

(Testimony of Stephen Davidson Bechtel.)

Q. Did Mr. Larson submit an estimate of the job and cost of doing the tunnel portion of the job to you?

A. He submitted it to me through Al. Orselli and with Al. Orselli.

Q. What was thereafter done with that estimate?

A. Upon receipt of the details of this estimate I called a conference, which was attended by Larson, Orselli, Joseph Shaw, and Fontaine. We went over the details of the estimate very carefully, reviewed the method, the assumptions, the figures, and the summaries of the entire estimate.

Q. What was done then?

A. In the course of our conference I instructed Shaw to make extensions on the Larson estimate which we had at that time, and we discussed all phases of it, and at the completion of the conference I instructed Shaw, with Orselli's assistance, to summarize them and return the same to me at a future [963] date when they would be needed for compilation with other estimates on other portions of the project.

Q. Was that done?

A. That was done.

Q. Then what did you do?

A. I used that summary, that is, the Larson tunnel estimates, with the estimates for the other portions of the project, as a basis for the bid. That was discussed with the directors of the Six Companies

(Testimony of Stephen Davidson Bechtel.)

of California, and was used as a basis of the bid which was subsequently submitted.

Q. Can you state when the Six Companies of California was organized? A. May 15, 1934.

Q. Did you become an officer of the corporation? A. I did.

Q. What officer? A. Its President.

Q. How long thereafter did you remain president of the Six Companies?

A. I believe it was until February 29, 1936.

Q. Did you sign the bid which was submitted by the plaintiff to the defendant in this case?

A. I did.

Q. Did you submit that bid to the defendant?

A. You mean to the Joint Highway District?

Q. To Joint Highway District No. 13.

A. I did.

Q. Upon what were the costs which went to make up the part of the contract dealing with the tunnel which were included with that bid based?

Mr. Wittschen: Objected to as immaterial, irrelevant, and incompetent, and calling for a conclusion and opinion of the witness, and also on the ground that the bid speaks for itself. It is not upon what the costs were based, but the bid by which the defendant would be bound.

Mr. Marrin: If your Honor please, we are again offering this evidence for the purpose of connecting up the estimate of Mr. Larson with the bid which was submitted, showing that it was [964] the basis of the bid of this plaintiff, and we offer to prove

(Testimony of Stephen Davidson Bechtel.)

through this witness that that estimate made by Mr. Larson was the basis of the plaintiff's bid so far as the tunnel portion of the project was concerned.

Mr. Wittschen: I submit that has already been asked and answered without objection, namely, that Mr. Larson gave figures to the Bechtel Company interests, and Mr. Bechtel has said that he used those in preparing the bid.

Mr. Marrin: At the time we offered that evidence Mr. Wittschen suggested that this would be the time to offer it.

Mr. Wittschen: I said that I would object to it, but you would get the ultimate fact by asking him if he did rely upon the Larson estimate. That you have already done and I did not object to it.

Mr. Marrin: That is what I am asking him now.

The Court: State the question.

Mr. Marrin: Q. In making up the bid for the Six Companies of California to be submitted to Joint Highway District No. 13 for the contract which is in evidence in this case, did you rely upon the estimate prepared by L. M. Larson for that portion of the project relating to the tunnel?

Mr. Wittschen: Objected to as immaterial, irrelevant, and incompetent, and not binding upon the defendant.

The Court: You may answer.

Mr. Wittschen: Exception.

The Court: You may answer.

A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: Q. Mr. Bechtel, how many feet of timber were included in the estimate upon which the bid of plaintiff was based?

Mr. Wittschen: Objected to as immaterial, irrelevant, and incompetent, and calling for a conclusion, and not binding on the defendant. [965]

Mr. Marrin: It is not a conclusion.

The Court: What do the plans and specifications say about the timber?

Mr. Wittschen: The plans and specifications say that all timber necessary will be supplied by the contractor.

Mr. Marrin: And shall be removed unless the District Engineer permits it to remain in.

Mr. Wittschen: No, if impracticable to remove it may be kept in, or, stating it in another way, they shall be taken out unless the District permits them in.

Mr. Marrin: That question does not call for any kind of a conclusion.

The Court: I know, but the testimony is going in and we must keep in mind the proposition, suppose it is a million or half a million, then what would be the difference?

Mr. Wittschen: It would make no difference, whatever necessary shall go in.

Mr. Marrin: We propose to show by this that the amount of timber actually required in constructing this tunnel was about six or seven times the amount plaintiff estimated.

(Testimony of Stephen Davidson Bechtel.)

Mr. Wittschen: That would be his misfortune, if that's the fact, but it would not be binding upon the defendant, which did not estimate it.

Mr. Marrin: That is your conclusion, and we think we have a right to prove the fact, and we offer this testimony for that purpose.

The Court: I will give you a record, but I do not want to mislead you to your injury. You may answer.

Mr. Wittschen: We note an exception.

A. Might I ask, do you mean the board feet of timber, or linear [966] feet in the tunnel?

Mr. Marrin: No, I mean board feet of timber.

A. Between 1,800,000 and 1,900,000 board feet.

Q. Did the bid on the tunnel section of the project include an estimated profit in addition to the estimated cost? A. It did.

Mr. Wittschen: Objected to on the ground it is immaterial, irrelevant, and incompetent, and ask that the answer go out pending the objection.

The Court: It may go out.

Mr. Wittschen: And not in any wise binding on the defendant.

The Court: You may answer.

Mr. Wittschen: Exception.

A. It did. [967]

Mr. Marrin: Q. Mr. Bechtel, did you have any discussion with Mr. Boggs, during the course of the construction work under this contract, regarding an extension of time? A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. State when you had the first discussion with Mr. Boggs, who was present, and what was said.

A. In April or May, 1934——

Mr. Wittschen: Did you ask him for a conversation? If you did, I would like to make an objection.

Mr. Marrin: Yes.

Mr. Wittschen: May I interpose the objection now? We object on the ground it is incompetent, irrelevant and immaterial, calling for testimony which is not binding upon the defendant. If your Honor cares to have that argued, I am prepared to argue it. You permitted it, in connection with the other witness, on the ground it might come in subject to a motion to strike. The contract between the parties cannot be varied in any way by what the Engineer of the District did. The Kelly case that we have cited in the brief shows that. If the purpose of this questioning is merely to show they asked for an extension of time, which was denied, I will object to that on the ground that that was not one of the things which was within the province of the District Engineer; everything else connected with the construction was, but, on the matter of extensions of time, the contract provided they must apply for that to the Board of Directors of the District. We have no objection to their written applications for extensions of time going into evidence. They asked for time, and there were letters back from the District denying it; but conversations with the District Engineer, who had nothing to do with that matter, we

(Testimony of Stephen Davidson Bechtel.)

claim are wholly immaterial. We are not trying to exclude the fact they asked for time, and that that time was denied; that is a matter of written record, which we are willing to admit. [968]

Mr. Marrin: If the Court please, the specifications, in Section 4, page 3, which is a part of that contract, after stating the time for the doing of the work, states, under the heading, "Extension:"

"The time during which the Contractor is delayed in said work by Acts of God, or by stormy or inclement weather, or by any reason which, in the judgment of the District Engineer, unavoidably delays the work, shall be added to the aforesaid time for completion, provided that the Board of Directors approve in advance the written application therefor, which must be made by the Contractor for such an extension, before the expiration of the time limit fixed herein, or a duly granted extension thereof."

Now, if the Court please, this contract states, as I have stated, that, when cause which in the judgment of the District Engineer unavoidably detains the work, he shall give the Contractor the right to extend the time. It is our position in this case that—

The Court: Pardon me. Following that language, it provides a method by which—

case that judgment of the District Engineer

Mr. Marrin: Surely; but it is our position in this

(Testimony of Stephen Davidson Bechtel.)

must be exercised in a fair and unbiased manner for each party. He is not acting alone for the District. He is acting for the Contractor as well as the District. If, in his judgment, the Contractor has been unavoidably delayed, the Contractor is entitled, as of right, to an extension of time. Upon that ground, your Honor, we submit that we are entitled to show the action of the District Engineer. We are entitled to show, by any conversation with him, what he thought about whether or not the Contractor was or was not delayed. If we can show that, in his judgment, the Contractor was unavoidably delayed, and can show by the [969] conversations with him that he failed to certify that to the Board of Directors, then the action, in denying the extension of time, was wrongful. We are offering that evidence for this purpose; and we feel certain that, under the authorities, we have a right to prove it. The acts of engineers and architects, under clauses such as this, cannot be arbitrary or capricious; and, if the acts are, you have a right to set it aside or to show, by the arbitrariness or capriciousness of the action—we offer this testimony for the purpose of proving that; and we feel, under the cases, that we have a right to attack the position on that.

Mr. Wittschen: I want to point out, in the first place, there is not a word in the pleadings that any action of the Engineer was arbitrary. They had a right, upon the contract being breached by the District,—if you will assume it was breached,—to bring

(Testimony of Stephen Davidson Bechtel.)

an action in the form of a common count; but they have no right to claim a prerequisite to recover such as the certificate of the engineer, if that was a prerequisite, was given him, because of some fact, without pleading the fact to show why it was not given. All presumptions are in favor of the Engineer. But that is not the point of this objection. The point of my objection here goes further than that; and that is, the Board of Directors alone have the right to determine whether or not the time shall be extended; and I have no objection, as I stated, to showing a request for time was made and was refused; but I do object to the so-called hearsay evidence, statements of the Engineer, upon a matter which was supposed to be acted upon by the Board.

Mr. Marrin: Well, under this contract, if, in the judgment of the District Engineer, the Contractor is unavoidably delayed, the Board of Directors has no discretion; it must grant the extension of time. In order to show his judgment on the matter, it is necessary [970] for us to show, so far as we can, the state of mind; and his conversations on that subject are certainly pertinent and relevant.

Mr. Wittschen: His advice to the Board of Directors might be, if you want to call him for that; but certainly not conversations he had with the Contractor.

Mr. Marrin: We think we will prove, if your Honor please, before this case closes, that the Engineer was so under control of the Board of Directors

(Testimony of Stephen Davidson Bechtel.)

that he probably did not report to them the real judgment that he had in connection with the matter.

The Court: Well, as a legal proposition, let us assume that the Engineer acted arbitrarily and, in the absence of any written record——

Mr. Marrin: Your Honor, we will follow this with written records.

The Court: On the very subject matter you are covering now?

Mr. Marrin: Yes.

Mr. Wittschen: We have no objection to the writings.

The Court: I will give you a record on it. Proceed.

Mr. Wittschen: Exception.

Mr. Marrin: Q. Do you wish the question read, Mr. Bechtel? A. Yes.

(Pending question was read by the reporter.)

The Witness: A. In April or May, 1934, Wallace Boggs, T. M. Price——

Mr. Marrin: Q. Pardon me, Mr. Bechtel. 1935, you mean, don't you? You said 1934. That was before the term of the contract.

A. 1935—April or May, 1935.

The Court: Q. Where did it take place?

A. In front of the Six Companies' job office,—the steps of our office.

Q. Is that the nearest you can fix the time?

A. Yes. Tom Price, [971] Wallace Boggs and I met to discuss the job. I told Mr. Boggs of the diffi-

(Testimony of Stephen Davidson Bechtel.)

culties we had encountered,—the unusually bad weather conditions, the difficulties we were having in procuring adequate supplies of competent men under the restrictions of the contract, and the ground conditions, which were very different than those we had contemplated. I told him the conditions were beyond our control, and they entitled us to an extension of time; but that, before applying for the extension of time, I desired to discuss it with him, so he would be familiar with our application. He said he knew of these conditions, and that they entitled us to an extension of time; but that he did not favor our making application for extension of time, because it was not known as to what period of time would be required to complete the job. About this time in our conversation, Tom Price left. Boggs and I continued our frank discussion; and he told me, in substance, that he could not give us an extension of time without the approval of the Board of Directors and without the approval of the District's attorney,—Mr. Tinning.

Mr. Marrin: Q. And that was all the conversation? A. In substance, yes.

Mr. Marrin: I have here a copy of letter of June 10, 1935, Mr. Tinning. I assume you have the original. Will it be stipulated that this is a true copy of a letter dated June 10, 1935, addressed by Six Companies of California, by S. D. Bechtel, President, to the Board of Directors, Joint High-

(Testimony of Stephen Davidson Bechtel.)

way District No. 13 of the State of California, 1448 Webster Street, Oakland, California.

Mr. Wittschen: With the same understanding we had, subject to checking?

Mr. Marrin: Surely.

Mr. Tinning: So stipulated.

Mr. Marrin: That was sent by Six Companies of California, and [972] received by the defendant?

Mr. Tinning: Yes.

Mr. Marrin: I offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 45.")

Mr. Marrin: I would like to read the letter, if your Honor please. It is dated June 10, 1935, and reads as follows:

PLAINTIFF'S EXHIBIT No. 45

June 10th, 1935

The Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sirs:

Pursuant to the provisions of subsection C of Section 4 of the Specifications for the construction of the Broadway Low Level Tunnel, said section 4 having to do with the subject of time, we hereby make written application for an ex-

(Testimony of Stephen Davidson Bechtel.)

tension of the time for completion of the work covered by the contract in the amount of one hundred eighty days (180).

Said demand is based upon the provisions of said subsection C of Section 4, and upon the grounds that the work has been delayed by Acts of God, stormy and inclement weather, and other reasons beyond our control which will have unavoidably delayed the work.

The other reasons above mentioned may be made the subject of a detailed statement thereof by us at a later date.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA

By S. D. BECHTEL,

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 45. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Marrin: Q. After sending this letter, Mr. Bechtel, did you again discuss the subject of time extension with Mr. Boggs?

A. A few days later, I met Boggs on the job, and he said, in substance, that our application had been embarrassing—

Mr. Wittschen: Pardon me. I want to object to

(Testimony of Stephen Davidson Bechtel.)

the conversation. Your question did not call for a conversation, did it?

Mr. Marrin: Yes.

Q. Did you have a conversation with Mr. Boggs?

A. Yes. [973]

Q. State when that conversation was held, who was present, and what was said.

Mr. Wittschen: We object to that as incompetent, irrelevant and immaterial, and upon all the grounds previously stated.

The Court: Overruled.

Mr. Wittschen: Exception.

The Witness: A. Shortly after we submitted our formal application for extension of time, I met Wallace Boggs on the job, in company with my brother Kenneth. Boggs said that our application for extension of time had been embarrassing; he was quite disturbed over the matter.

Mr. Marrin: I have here, Mr. Tinning, the original of a letter signed by Joint Highway District No. 13 of the State of California, by Harry M. Stow, Secretary, dated July 12, 1935, addressed to Six Companies of California. Will it be stipulated that that was sent by the District and received by the plaintiff about the date it bears?

Mr. Tinning: Yes.

Mr. Marrin: And may we stipulate that we may substitute a copy for the original?

Mr. Tinning: Yes.

Mr. Marrin: I offer that in evidence.

(Testimony of Stephen Davidson Bechtel.)

(The letter was marked "Plaintiff's Exhibit No. 46.")

Mr. Marrin: I should like to read the letter. This is a letter on the letterhead of Joint Highway District No. 13 of the State of California; it is dated July 12, 1935, and reads:

PLAINTIFF'S EXHIBIT No. 46

Joint Highway District No. 13
of the
State of California

Oakland, California
July 12, 1935

Six Companies of California,
155 Sansome Street,
San Francisco, California
Attention Mr. S. D. Bechtel, President
Gentlemen:

I am authorized by the Board of Directors of Joint Highway District No. 13 to advise you that your application dated June 10, 1935, for a 180 day extension of time of completion of the work to be performed by you under your contract with the District dated June 4, 1934, has been denied.

The Board of Directors is of the opinion that no delay in the prosecution of the work under the contract has been occasioned by acts of

(Testimony of Stephen Davidson Bechtel.)

God, stormy or inclement weather, or any other reason beyond your control as contractor.

Yours very truly,

JOINT HIGHWAY DISTRICT
No. 13 OF THE STATE OF
CALIFORNIA

By (Signed) HARRY M. STOW,

Secretary.

HMS:EK

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 46. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [974]

Mr. Marrin: Mr. Tinning, I have here a copy of a letter dated July 26, 1935, signed by Six Companies of California, by S. D. Bechtel, President, addressed to the Board of Directors of Joint Highway District No. 13, State of California. Will it be stipulated that that is a true copy, subject to your check, of a letter which was sent by Six Companies of California to the defendant Joint Highway District No. 13, about the date thereof?

Mr. Tinning: Yes.

Mr. Marrin: I offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 47.")

Mr. Marrin: I should like to read that letter. The letter is dated July 26, 1935, addressed to Board of Directors, Joint Highway District No. 13 of the

(Testimony of Stephen Davidson Bechtel.)

State of California, 1448 Webster Street, Oakland,
California. It reads: [975]

PLAINTIFF'S EXHIBIT No. 47

July 26th, 1935

Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street,
Oakland, California

Dear Sirs:

Under date of June 10th, 1935, we addressed you a letter requesting extension of time for completion of the work included in our contract with your District for the construction of the Broadway Low Level Tunnel, all in accordance with the provisions of the specifications covering the subject of "Time". Under date of July 12th, 1935, you replied to advise that our application requesting this extension of time had been denied by your Board, and stating it to be the opinion of the Board that "no delay in the prosecution of the work under the contract has been occasioned by Acts of God, stormy or inclement weather, or any other reason beyond your control as contractor."

Inasmuch as this reply amounts to a statement that your Board has determined that no ground for a claim for extension of time exists in our favor, we must make answer to same.

(Testimony of Stephen Davidson Bechtel.)

This is written to advise you that the above quoted portion of your letter of June 4th is an incorrect statement, and is not in accordance with what has been stated to us by your Chief Engineer and others connected with the District.

The delay which has already occurred has been caused by the heavy rain fall of the last rainy season, which was much greater than in any season in recent years, and by the fact that the condition of the ground was such that faster progress was impossible. The actual ground conditions have been far worse for working purposes than the condition of the ground shown by the geological report made by the geologist for the District; and this has resulted in retarding the speed of the work.

Within the past three months Mr. Boggs, your chief engineer, has advised the writer of this letter that the delay in the progress of the work was beyond the control of the contractor and was in no manner our fault, and has stated we have a proper ground to request an extension of time, but that he would not approve such an application at this time because it might later develop that the extension of time would be unnecessary. He has made substantially the same statement to Mr. T. M. Price within the last sixty days and has likewise made substantially similar statements to Mr.

(Testimony of Stephen Davidson Bechtel.)

DeLancey Smith. Under the circumstances, the grounds assigned in your letter of June 4th for denying the application are not in accord with the facts or with the opinion of your engineer, and therefore should be withdrawn, even though action on the application for an extension is deferred at this time.

We, therefore, write this letter to protest against the denial of the extension for the reasons given in your letter, and to reaffirm the application made by our letter of June 10th and our right to an extension.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA

By S. D. BECHTEL,

President.

cc—W. B. Boggs

cc—A. B. Tinning

cc—T. M. Price

[Endorsed]: U. S. Dist Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 47. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [975]

Mr. Marrin: Mr. Tinning, I have a copy of a letter signed by Six Companies of California by S. D. Bechtel, President, dated August 23, 1935, addressed to the Board of Directors, Joint Highway District No. 13 of the State of California. Will it be stipulated that this is a copy of the original?

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: So stipulated.

Mr. Marrin: And that it was sent by Six Companies and received by the District on or about that date?

Mr. Tinning: Yes.

Mr. Marrin: I offer that in evidence.

The Court: It may be admitted and marked.

(The letter was marked "Plaintiff's Exhibit 48")

Mr. Marrin: (Reading:)

PLAINTIFF'S EXHIBIT No. 48

August 23, 1935

Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street,
Oakland, California

Dear Sirs:

In Re: Construction of Broadway Low
Level Tunnels.

At the present time we are engaged in installation of the type "A" concrete tunnel section, and while we will continue to proceed with the installation of same in the excavated portions of the two tunnels, we hereby notify you that we are informed and advised by our engineers that the section in question is inadequate and unsafe.

Under date of August 19, 1935, Messrs. T. L. Phillips and Fred H. Tibbetts, consulting engi-

(Testimony of Stephen Davidson Bechtel.)

neers of San Francisco, advised us in writing that the continued installation of the type "A" section endangers the structural safety of the work, the safe operations of ourselves as contractors, and the future safety of the public. They recommend that same be enlarged and strengthened and further reinforced in order to make same an adequate and safe installation suited to the nature of the ground conditions which have been encountered and for the uses to which the tunnel will be put after completion.

The condition of the ground encountered in the excavation of the tunnels thus far has been different from that contemplated by the geological report and the plans and specifications which form a part of our contract with you. All of the ground is of extremely heavy character, and treacherous in nature, and none of it is self-supporting; and the type "A" section was not resigned for such ground. It is particularly apparent that the type "A" section was not designed to be installed in ground which is not self-supporting.

Under these circumstances we will proceed with the installation of type "A" section of concrete under protest and upon notice to you as above stated; and we further hereby notify you that we do not assume any liability or responsibility for the safety or adequacy of any such installation, but, on the other hand, will pro-

(Testimony of Stephen Davidson Bechtel.)

ceed with such installation only upon condition that full liability of any kind, civil or criminal, which may arise from or be caused by installation of same be assumed by you.

In view of our conclusion above expressed, we shall feel free to discontinue the further installation of this type section unless within a reasonable time after receipt of this notification to you, you alter the design of the section to meet the objections thereto, or notify us in writing that you assume all responsibility and liability of any kind or character, civil or criminal, which may arise from the installation of same.

We are not now excavating in the headings of the tunnels on either the easterly or westerly end thereof; and we do not believe it wise to resume excavation therein until such time as you advise us whether or not you propose to alter or modify type "A" tunnel construction, as in the event a change is made in same, the excavation can be made to conform to such altered design.

This letter is written without prejudice to any rights which may exist in our favor in connection with the entire subject matter, and for the purpose of putting you on notice. We understand that Mr. Phillips and Mr. Tibbetts orally notified Mr. Boggs, your engineer, on August 19th, 1935, substantially to the same

(Testimony of Stephen Davidson Bechtel.)

effect as herein stated, and we write this letter to make the matter one of record.

Yours very truly,

SIX COMPANIES OF
CALIFORNIA

By S. D. BECHTEL,

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 48. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [978]

Mr. Marrin: I have here a copy of a letter dated August 28, 1935, from Six Companies of California, addressed to Board of Directors, Joint Highway District No. 13 of the State of California. Will it be stipulated subject to your check that it is a true copy of a letter sent by Six Companies of California to Joint Highway District No. 13 on or about the date thereof?

Mr. Tinning: It is a copy of a letter which was delivered personally at a meeting of the Board of Directors.

Mr. Marrin: Yes. I will offer the letter in evidence.

The Court: It may be admitted and marked.

(The document was marked "Plaintiff's Exhibit 49.")

Mr. Marrin (reading):

(Testimony of Stephen Davidson Bechtel.)

PLAINTIFF'S EXHIBIT No. 49

August 28, 1935

Board of Directors,
Joint Highway District No. 13,
of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sirs:

Your attention is directed to the following:

1. The undersigned heretofore entered into a contract with your District for the construction of the Broadway Low Level Tunnel and approaches, to which contract and the documents forming a part thereof, and the geological report referred to in the specifications, reference is hereby made for a full and complete statement of the details thereof.

2. The parties intended, and the contract and documents above mentioned forming a part thereof, and the geological report, contemplated that the two tunnels included within the contract would be excavated thru ground which was represented to be and would be found to be self-supporting for nearly the entire length of the tunnels.

3. The design and the plans and specifications call for the installation of type "A" tunnel construction for 5,620 feet of the total length of tunnels. We notified you in our letter to you dated August 23rd, 1935, that type "A" tunnel

(Testimony of Stephen Davidson Bechtel.)

construction is unsafe and inadequate for installation in the entire length of ground thus far encountered in the tunnels.

4. The character of ground encountered thus far in the excavation for the tunnels, with but slight exception, has been and is entirely and radically different from the character of ground represented to the contractor as that which would be encountered, and is likewise radically different from the character of ground which was contemplated by the specifications, as is apparent from the terms and conditions set forth therein. By reason of this fact we have been required to do additional work, supply additional materials, and have been put to great additional cost and expense not contemplated or intended by the contract, and not intended to be borne or assumed by the contractor in the construction of the tunnels. You are hereby notified that we as contractor now do claim and will continue to claim against you for the entire additional cost and expense and the reasonable value, including a reasonable profit, of the additional work to which we have been and will be put, if we continue with the performance of our contract for construction of the tunnels.

5. At this time we are unable to furnish an exact detailed statement of the amount of our claim. It will include the reasonable value, including all cost and expense to which we may

(Testimony of Stephen Davidson Bechtel.)

have been heretofore or may be hereafter put, of all additional excavation, timbering, concreting, and labor and materials of any kind or character occasioned thereby, including any and all items attributable thereto of any kind or character.

6. You are further advised and notified that you are in default in performance of your obligations under our contract with you by reason of your failure to furnish necessary lines and grades and any other engineering which you are obligated to furnish under the terms of the contract.

7. You are further notified that we have and assert a valid claim for an extension of time for the performance of our contract arising from the causes heretofore stated to you in our request for such extension dated June 10th, 1935, and in addition to the extension of time requested therein, we now assert a right to and request such additional extension of time as may be necessary to complete the contract, in the event that we continue to perform same, based upon the following reasons in addition to those heretofore asserted:

(a) Heavy, treacherous and unforeseen character of the ground making construction more difficult and slower through no fault of the contractor;

(b) Inadequacy and unsafety of the design in accordance with our letter to you dated August 23, 1935;

(Testimony of Stephen Davidson Bechtel.)

(c) Additional work required to be done not included intended, or contemplated by the contract, plans and specifications.

8. By reason of the facts asserted in this letter a right to rescind our contract with you has arisen in our favor, but we do not desire to exercise such right unless it is absolutely necessary, as we consider that it is the primary purpose and object of the District to complete the tunnel and the entire project as speedily as possible. If we exercise our right to rescind at this time, it will result in great delay to the project and might result in loss of a portion of the work already done in the construction of the tunnels. We are anxious that the work be completed, and to complete same for you; and we assume that you are of the same mind.

9. We invite your consideration to the various matters set forth in this letter, but must inform you at this time that if we continue with the work it will be only upon the following conditions:

(a) That provision be made immediately to pay us the reasonable value of the additional work we have been called upon to perform, or which it may be necessary to perform hereafter.

(b) An extension of time be granted immediately which will enable us to complete the work without penalty unless delay hereafter occur which is due to our fault;

(Testimony of Stephen Davidson Bechtel.)

(c) Henceforth you perform all the necessary and proper engineering work, including the giving of all lines and grades, and assume responsibility for all engineering work which we have already performed and pay the cost of same.

10. We will proceed with installation of type "A" tunnel construction in the excavated portion of the two tunnels from the westerly end thereof, subject to the conditions specified in our letter to you dated August 23, 1935. We will do this for the purpose of preventing any loss that might otherwise occur of the excavated portion of the tunnels in which concrete has not yet been installed, unless notified by you to cease such work. We will not perform any other work in the construction of the tunnels under our contract with you unless notified within a reasonable time after receipt of this letter that the conditions set forth hereinabove are satisfactory and will be met by you.

Yours very truly,

SIX COMPANIES OF
CALIFORNIA

S. D. BECHTEL,

President.

SDB/b

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 49. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [980]

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: Mr. Tinning, Mr. Trefethen suggests, as you recall, that we would stipulate the time on August 28, 1935 when this letter was delivered.

Mr. Tinning: You will be surprised to know that our file copy of that has 3:30 P. M. endorsed on it by the Secretary of the District.

Mr. Marrin: Will you stipulate that was the time, then?

Mr. Tinning: Yes.

Mr. Marrin: Q. Mr. Bechtel, subsequent to August 28, 1935, did you have any further discussions with Mr. Boggs regarding the subject of extension of time? A. Yes.

Q. Will you state when, as nearly as you recall, the conversation was held, where it was held, who was present, and what was said?

Mr. Wittschen: The same objection, on all of the grounds heretofore stated.

The Court: The same ruling.

Mr. Wittschen: Exception.

A. About November 19, 1935, in the office of Six Companies of California, at the job site, Wallace Boggs, V. G. Hindmarsh, DeLancey Smith, and I met and discussed the project, including the method of timbering, the grouting, the removal of the cave-in, the general progress of the job, when the job would probably be completed, and this led into a discussion as to what period of extension of time Six Companies of California thought it was

(Testimony of Stephen Davidson Bechtel.)
entitled to, because [984] of the August 28th cave-in. Hindmarsh said that he felt, he thought we were entitled to 90 to 120 days. Boggs said in substance that he would not say what period of time, extension of time, we were entitled to, but that we were entitled to an extension of time growing out of the slide. The subsequent discussion referred to or brought up the matter of preparing a revised construction schedule. Boggs asked Hindmarsh to prepare a new construction schedule. Hindmarsh said that he would prepare a new construction schedule, and it would be ready about January 1, 1936. Boggs and Hindmarsh both said that they would then collaborate on the revised construction schedule, so that it would be in a form agreeable to both, and that they would also at that time collaborate on a form of application for extension of time and the period of extension of time which should be included in this new application for an extension of time, so that when it was prepared it would be in a form that Boggs could recommend and approve. Boggs said that it should be on non-controversial grounds, if possible, so as not to arouse the antagonism of the District's Attorney, Mr. Tinning. Boggs also said in substance that the District's objection to the extensions of time to date had probably not been caused by questioning our right to an extension of time, but it would be better judgment not to confuse the more major points of

(Testimony of Stephen Davidson Bechtel.)
controversy which existed between the district and the contractor.

Q. Is that all the conversation that you recall?

A. In substance.

Mr. Tinning: There are a number of letters following along from the last letter that you offered, dated August 28th. Do you propose to offer those?

Mr. Marrin: I propose to offer all of those documents, but I have not intended to offer them through Mr. Bechtel.

Mr. Tinning: We shall.

Mr. Marrin: That is all right. [985]

Mr. Tinning: On cross-examination, I just wanted to understand.

Mr. Marrin: I planned to introduce them by a witness who will follow, but we have no objection to your doing that. Mr. Tinning, I have here a copy of a letter written by Six Companies of California, dated February 25, 1936, to Mr. Thomas E. Caldecott, President, Directors Joint Highway District No. 13 of the State of California. Will it be stipulated that is a true copy of a letter sent by Six Companies of California?

Mr. Tinning: Yes.

Mr. Marrin: I offer that in evidence.

Mr. Wittschen: We object to it on the ground it is immaterial, irrelevant, and incompetent, self-serving, and has nothing to do with any controversy in the case. This is a letter offering to arbitrate all of the differences.

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: That is correct.

Mr. Wittschen: Objected to on all of the grounds heretofore stated.

Mr. Marrin: It is a letter from the company to the District offering to arbitrate all of these differences between the plaintiff and the defendant in this case.

The Court: The legal objection is good. A jury is absent, however, and I will allow it.

Mr. Wittschen: Exception.

(The document was marked "Plaintiff's Exhibit 50.")

Mr. Marrin (Reading):

PLAINTIFF'S EXHIBIT NO. 50

February 25, 1936.

Mr. Thomas E. Caldecott,
President, Directors Joint Highway District
No. 13 of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sir:

Our attention has been directed to an editorial in the Oakland Tribune of Monday, February 24th, in which it is suggested that an impartial investigation be made of questions arising out of the construction of the Broadway Tunnels.

You will recall that we have always been willing to submit any questions arising in our transactions with your directors to independent

(Testimony of Stephen Davidson Bechtel.)

and impartial consideration of any competent and disinterested group or board. In fact, we have urged such a course. As you will recall, on August 28th, 1935, and for some days before that time, we directed your attention to the possible hazard to workmen due to the construction of the present designed structure in the treacherous ground encountered, and at that time urged that you join with us in arranging for an independent board of engineers to determine whether our position was well taken.

We are writing you to assure that we welcome such independent investigation for the mutual benefit that may be gained therefrom, and it will be entirely satisfactory to us if the results of such an investigation are made binding on you and ourselves or are purely advisory.

In the event an independent board or authority is assembled to investigate the situation, we believe it would be advisable to have such a board consider the following general questions.

- a. Safety of design from a construction and use standpoint.
- b. Possible modification of design to expedite completion of the project and promote safety to workmen.
- c. Whether ground conditions are radically different from those implied in the

(Testimony of Stephen Davidson Bechtel.)

design of the tunnel and predicted in the geological report, and if so, is the contractor entitled to a modification of its contract to meet actual conditions.

d. Whether contractor should be granted extension of time to complete the work.

Should the above suggestion meet with favorable consideration from you, we will be pleased to confer with you and your co-directors to expedite giving advice to such persons or public bodies as should be informed concerning our joint views.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA.

By S. D. BECHTEL,
President.

[Endorsed]: Plff's Ex. No. 50. No. 20101-R.
Filed April 22, 1938. Walter B. Maling, Clerk. By
J. A. Schaertzer, Deputy Clerk.

[1986]

I have an original letter signed by Thomas E. Caldecott, addressed to the Six Companies of California, dated February 28, 1936. Will it be stipulated that that was sent by Mr. Caldecott and received by Six Companies of California on or about that date?

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: Yes.

Mr. Marrin: I offer it.

The Court: It may be admitted and marked.

(The document was marked "Plaintiff's Exhibit 51.")

Mr. Marrin (Reading):

PLAINTIFF'S EXHIBIT NO. 51

Joint Highway District No. 13
of the
State of California

Oakland, Calif.,
February 28, 1936.

Six Companies of California,
Field Office—Post Office Box 120,
Berkeley, California.

Gentlemen:

Herewith in reply to your letter of February 25th, addressed to me as President, Board of Directors, Joint Highway District No. 13, by authority of the Board of Directors of Joint Highway District No. 13 of the State of California, I make the following reply to the letter referred to, following is a verbatim copy of the statement read to Mr. Kaiser and Mr. Trefethen who represented the Six Companies at a meeting of the Board of Directors of the District held today;

"The letter of Six Companies of California, dated February 25, 1936, addressed to me as

(Testimony of Stephen Davidson Beehtel.)

president of the Board of Directors of Joint Highway District No. 13, has been considered by the Board.

The questions which the Six Companies desires the Joint Highway District to join in submitting to an independent board for consideration fall into two classes: (1) Does the design for the permanent tunnel lining, in view of the ground conditions encountered in construction, provide a safe structure for use by the public in the future; (2) Questions involving the legal duties and responsibilities of the contractor under its contract for the construction of the tunnel for the District.

The contractor has stated that engineers employed by it have reported that if the tunnel is constructed in accordance with the design, that by reason of ground conditions encountered, the structure will be unstable, subject to failure, and thus endanger the lives and the investment of the public. This is contrary to the engineering information received by this Board from all of its engineers. The Board is willing to hear what the contractor and its consulting engineers wish to present in connection with the question of adequacy of the permanent structure, and due consideration will be given to the matter by this Board and its consulting engineers.

However, any such discussion must be limited to the question of safety to the public using

(Testimony of Stephen Davidson Bechtel.)

the tunnel, and must not include any discussion of the contractual obligations of the District or the contractor, such issues being governed entirely by the contract, and in case of a dispute between the parties can only be determined by a court of competent jurisdiction.

The question of safety to the workmen during construction is a responsibility that has been definitely assumed by the contractor which has agreed to take all measures necessary for the safety of its workmen in accordance with the valid regulations and safety orders of the Industrial Accident Commission of the State of California.

Upon receiving the engineering information above mentioned from you, preferably in writing, or if this is impracticable at a conference to be arranged for that purpose, the Board will give it the most careful consideration, and will take such further steps as may be advisable in the public interest."

Very truly yours,

(Signed) THOMAS E. CALDECOTT,
President—Board of Directors
of Joint Highway District No.
13 of the State of California.

TEC:MC

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Plff's Ex. No. 51. Filed April 22, 1938.

(Testimony of Stephen Davidson Bechtel.)

Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk. [988]

Now, I have here, Mr. Tinning, a copy of a letter sent by Six Companies of California, signed by Henry J. Kaiser, President, to Joint Highway District No. 13, dated February 29, 1936, which is a reply to Mr. Caldecott's letter. Will it be stipulated that is a true copy of a letter that was sent and received about that date?

Mr. Tinning: It is so stipulated.

Mr. Marrin: I will offer that in evidence.

The Court: It may be admitted and marked.

(The document was marked "Plaintiff's Exhibit 52.")

Mr. Marrin: This letter is dated February 29, 1936. (Reading):

• PLAINTIFF'S EXHIBIT NO. 52

February 29, 1936.

Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Attention of Hon. Thomas E. Caldecott,
President, Board of Directors

Dear Sir:

Replying to your letter of February 28th, the writer now has full authority to deal with the Board of Directors of Joint Highway District

(Testimony of Stephen Davidson Bechtel.)

No. 13, State of California, in behalf of Six Companies of California, and therefore you may consider this letter as a reply to your communication written to the Company under date of February 28th.

Your letter states that any discussions "must be limited to the question of the safety of the public using the tunnel" and that you are willing to give careful consideration to engineering information which may be submitted by the contractor. It is my understanding that several months ago, following the cave-in which occurred in August, discussions, extending over a period of a number of weeks, were had between your representatives and engineers employed by us, wherein the question of the ultimate safety and permanence of the completed tunnels (as well as other related problems) were given consideration; but no conclusive action resulted.

At our meeting on Friday, Mr. Boggs stated that these discussions and the engineering information submitted at that time were appreciated by him; but so far as we can learn, the opinions presented by us have never gotten beyond the consideration stage. Unless, therefore, some agreement concerning the practical problem of determining future action can be reached, I cannot see what, if anything, will

(Testimony of Stephen Davidson Bechtel.)

be accomplished merely by repeating the procedure followed several months ago.

Concerning the immediate problem of safety to the workmen during construction, you state that this "is a responsibility which has been definitely assumed by the contractor," and we infer from this statement that you take the position that this problem cannot be discussed. It is my view that because of circumstance beyond our control, and which are now more than ever apparent, this problem is a mutual one and cannot be separated from the more general problems relating to design, geology and methods of construction. Indeed, developments during the progress of the work have demonstrated the necessity of introducing construction of permanent character which was not contemplated and could not have been contemplated at the time the contract was undertaken. The responsibility for these changes—affecting, as they do, not only the immediate progress of the work but also the permanent structure—is, in my opinion, a matter jointly concerning both the contractor and the District.

Emphasizing this problem, we are in receipt of instructions from the Industrial Accident Commission of the State of California ordering us to "stop further driving of both tunnels until such time as future plans for driving are approved by the Industrial Accident Commis-

(Testimony of Stephen Davidson Bechtel.)

sion." This order is based upon the declaration that it is made "due to the character of the ground through which the Broadway Low Level Tunnels are being driven". Under the circumstances, unless some agreement concerning the practical problem of determining future action in this connection can be reached, I cannot see what, if anything, will be accomplished by the limited discussion which you have indicated you are willing to undertake.

Finally, your letter states specifically that any discussions "must not include any discussion of the contractual obligations of the District or the contractor, such issues being covered entirely by the contract, and in case of a dispute between the parties can only be determined by a Court of competent jurisdiction." As I have endeavored to indicate, practical problems—both immediate and ultimate—relating to the safety of the workmen and the safety and permanence of the completed tunnels, require full and fair discussion and determination at this time in the interests not only of the contracting parties, but of the workmen engaged in constructing the tunnels, the traveling public which may ultimately use the tunnels and the citizens of this community who have a direct and financial interest in the problems presented.

If the discussions are to be conducted within the limitations outlined in your letter, it is my

(Testimony of Stephen Davidson Bechtel.)

opinion that although they might be academically interesting, they could not in any sense accomplish any solution of our mutual problems. For instance, if it be determined after inquiry that changes in the design of the permanent structure are desirable from the point of view of ultimate safety, or that the construction cannot safely proceed, due to the character of the ground, under the plans and specifications, discussion of contractual obligations cannot be avoided.

The plain fact of the matter is that unless we can approach any discussions which may be undertaken with the idea of agreeing upon and carrying out a procedure which will solve the difficulties now presented, a further exchange of communications or the holding of further conferences will lead to no useful or practical conclusion. If you are willing to approach the matter from the point of view indicated in this letter, I can assure you that we will cooperate with you fully to arrive at some basis of mutual understanding which will allow the ultimate resumption of work in the tunnels and the completion of this contract on a basis of safety to the public, protection for the lives of the workmen and satisfaction to the Joint Highway District and Six Companies of California.

In order to facilitate any further action that may be taken, I have asked Mr. Paul St. Sure, who is known to you, to assist me in the matter,

(Testimony of Stephen Davidson Bechtel.)

and he is authorized to discuss related problems with your representatives.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA.

By HENRY J. KAISER,

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 52. Filed April 22, 1938. Walter B. Maling Clerk. By J. A. Schaertzer, Deputy Clerk. [990]

Mr. Marrin: I have a letter here, Mr. Tinning, dated January 12, 1935, addressed by Six Companies of California to Joint Highway District No. 13—rather, a copy of a letter, going back to another subject. Will it be stipulated that that is a true copy of the original, subject to your check?

Mr. Tinning: Yes, so stipulated, subject to check.

Mr. Marrin: That it was sent and received on or about that time?

Mr. Tinning: Yes.

Mr. Marrin: I would like to offer that in evidence.

*(The letter was marked "Plaintiff's Exhibit No. 53.")

Mr. Marrin: This is a letter dated January 12, 1935:

(Testimony of Stephen Davidson Bechtel.)

PLAINTIFF'S EXHIBIT NO. 53

January 12, 1935.

Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Gentlemen:

Referring to the establishment of the lines and grades in connection with the tunnel excavations, your attention is invited to letter of December 26, 1934, from our Mr. T. M. Price, Project Manager, to Mr. Wallace B. Boggs, District Engineer, and the letter of reply from Mr. Boggs to this company.

We are satisfied that our view of the matter is the proper one not merely under the general practice but also under the specific provisions of the specifications and we shall take up the matter further with you at a convenient early date.

In the meantime, in order not to delay the project, we are doing such of this work as is necessary for the immediate future but we believe that when we have conferred in the matter you will reimburse us for such expenditures as

(Testimony of Stephen Davidson Bechtel.)

- we shall, in the meantime, have incurred in doing this work.

Yours truly,

SIX COMPANIES OF
CALIFORNIA.

By S. D. BECHTEL,

President.

SDB:EB

cc—T. M. Price,

H. J. Kaiser,

Thelen & Marrin.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. *Deft's* Ex. No. 53. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [994]

Mr. Marrin: Now, I have here, Mr. Tinning, an original of a letter signed by Wallace B. Boggs, District Engineer, dated January 22, 1935, addressed to Six Companies of California. I assume it will be stipulated that that was the original and was sent and received about that date?

Mr. Tinning: So stipulated.

Mr. Marrin: And we may substitute a copy for the original?

I offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 54.")

Mr. Marrin: This letter is on the letterhead of Joint Highway District No. 13, dated January 22, 1935:

(Testimony of Stephen Davidson Bechtel.)

PLAINTIFF'S EXHIBIT NO. 54

Joint Highway District No. 13
of the
State of California

• Oakland, California,
January 22, 1935.

File: Broadway Tunnel.
Six Companies of California,
155 Sansome Street,
San Francisco, California.

Attention of Mr. S. D. Bechtel, President

Dear Sir:

I wish to acknowledge the receipt of your communication of January 12, 1935, with respect to engineering work connected with the establishment of lines and grades in the tunnels.

I am unable to agree with your contention that engineers from the District should perform the work which you request; the Specifications definitely provide that you should do your own engineering, of which this is a part. The District cannot approve any claim for reimbursement for expenditures made by you for engineering.

It is noted that you state you desire to discuss this matter further, presumably with the Directors of the District and I shall be very

(Testimony of Stephen Davidson Bechtel.)

pleased to arrange this meeting at the mutual convenience of both parties.

Yours very truly,

(Signed) WALLACE B. BOGGS,

District Engineer.

WBB/VE

CC

Mr. T. M. Price, Project Manager, Field Office,
Mr. Archibald B. Tinning, Attorney, Martinez.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 54. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [995]

Mr. Marrin: I have here, Mr. Tinning, a letter dated June 10, 1935, addressed by Six Companies of California, by S. D. Bechtel, President, to Joint Highway District No. 13. Will it be stipulated that that is a true copy of the original, and was sent and received at about that date?

Mr. Tinning: We will stipulate it is.

Mr. Marrin: I will offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 55.")

Mr. Marrin: This letter is dated June 10, 1935, addressed to: "The Board of Directors, Joint Highway District No. 13 of the State of California, 1448 Webster Street, Oakland, California.

(Testimony of Stephen Davidson Bechtel.)

PLAINTIFF'S EXHIBIT NO. 55

June 10th, 1935.

The Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sirs:

In connection with performance of our contract with you for construction of the Broadway Low Level Tunnel, we have heretofore discussed with your Chief Engineer, Mr. Boggs, and with your attorney, Mr. Tinning, the matter of performance of engineering work.

Since the beginning of the work and at the present time we are performing certain engineering work which is necessary for the proper construction of the project, and which we believe to be work which the District is obligated to do rather than ourselves under the terms of the contract and specifications covering the job.

Up to the present time we have done this work although protesting that it should be done by the District, and that the doing of same was not a part of our obligation. We have done

(Testimony of Stephen Davidson Bechtel.)

this in order that the job might continue without a shut-down, and are continuing to do same although we contend we are not obligated to do it.

At this time we desire to notify your District that we have done and are doing this work under protest, and that we shall and do hold you responsible for the doing of same and the results thereof, and for the cost of same.

In this connection it is our contention that it is the obligation of the District to furnish all necessary engineering to enable us to proceed with the performance of our contract, and that up to this time the District has not furnished such engineering.

Any engineering furnished by us which we believe should be furnished by the District has been so furnished by us without any recognition on our part of an obligation to furnish same; and to such extent as we may hereafter furnish any such engineering, this will advise you that we will do so under protest, if we do so at all, and will further advise you that we shall and do hold the District responsible for the results of any engineering so furnished by us which we contend the District is obligated to furnish,

(Testimony of Stephen Davidson Bechtel.)

and will further hold you responsible for the cost of same to us.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA.

By S. D. BECHTEL,

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 55. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [996]

Mr. Marrin: I have here, Mr. Tinning, an original of a letter from Joint Highway District No. 13, by Harry M. Stow, Secretary, dated July 12, 1935, addressed to Six Companies of California. Will it be stipulated that that is the original, and was sent and received at about that time?

Mr. Tinning: Yes.

Mr. Marrin: And no objection to offering a copy in evidence?

I will offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 56.")

Mr. Marrin: This letter is dated July 12, 1935, addressed to Six Companies of California, 155 Sansome Street, San Francisco, California, and reads as follows: [997]

(Testimony of Stephen Davidson Bechtel.)

PLAINTIFF'S EXHIBIT No. 56

Joint Highway District No. 13
of the State of California

Oakland, California

July 12, 1935

Six Companies of California,
155 Sansome Street,
San Francisco, California.

Attention Mr. S. D. Bechtel, President

Gentlemen:

The Board of Directors of Joint Highway District No. 13 has directed me to advise you that your letter of June 10, 1935 respecting the performance of engineering work by the District rather than yourselves, has been given full consideration.

The Board of Directors has concluded that the engineering work performed by the District Engineer is fully in accordance with the terms of the contract and the plans and specifications covering the work. The Board also is of the opinion that your purported protest and demand that the District provide engineering service for you, in addition to that which has been provided since the commencement of your work under the contract, and is now being provided, is not well-founded, and that your statement that you will hold the District respon-

(Testimony of Stephen Davidson Bechtel.)

sible for the cost of engineering and the results thereof, is not justified in law or in fact.

You are further advised that this District and its employees will continue in the future to assist and cooperate with you toward the successful completion of the project you undertook to construct under your contract of June 4, 1934. This District, however, does not contemplate deviating from the spirit or letter of the contract and the plans and specifications under which the work is being done, and expects you to proceed under the contract in accordance with law.

Yours very truly,

JOINT HIGHWAY DISTRICT No. 13
OF THE STATE OF CALIFORNIA

By (Signed) HARRY M. STOW

Secretary

HMS:EK

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 56. Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Marrin: I have here a copy of a letter signed by Six Companies of California, by S. D. Bechtel, President, addressed to the Board of Directors, Joint Highway District No. 13 of the State of California, dated July 26, 1935,—addressed to the

(Testimony of Stephen Davidson Bechtel.)

Board of [998] Directors; and that is dealing with engineering.

Mr. Tinning: We will stipulate to that.

Mr. Marrin: You will stipulate that that is a true copy. We will offer that in evidence.

(The letter was marked "Plaintiff's Exhibit No. 57.")

Mr. Marrin: This is a letter dated July 26, 1935, addressed to the Board of Directors, Joint Highway District No. 13 of the State of California, 1448 Webster Street, Oakland, California. It reads:

PLAINTIFF'S EXHIBIT No. 57

July 26th, 1935

Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sirs:

Under date of June 10th, 1935, we directed a letter to you concerning the doing of the engineering work in the construction of the Broadway Low Level Tunnel, to which letter we direct your attention. Under date of July 12th, 1935, you made reply to this letter, which has had our consideration.

Before we wrote the letter of June 10th, above mentioned, we had frequently contended to your Engineer and your attorney for the

(Testimony of Stephen Davidson Bechtel.)

position which we asserted in that letter, and we continued to contend for the same position that the contract and specifications provide for the doing of engineering work by the District which has been done by us as noted in our letter of June 10th. You take the opposite view. We believe our position is correct and that a difference of opinion has arisen which should be settled. We are sincere in our contentions and we assume that your views are likewise sincere. Therefore, the difference of opinion or dispute as to the true meaning of the contract and specifications raises a question concerning which both you and ourselves should welcome a determination.

Under the circumstances, we believe that the question at issue should be submitted to arbitration; and that both of us should agree to abide by the result of such arbitration. Accordingly, we are writing this letter to suggest to you that the question involved be submitted for final decision and determination to arbitration.

In the event our proposal is acceptable we suggest that an agreement for submission to arbitration be immediately arranged between us. Such agreement should provide in general for

(a) naming of three arbitrators if we can agree on their names; otherwise it should provide for selection of arbitrators, one to be

(Testimony of Stephen Davidson Bechtel.)

named by you, one by us, and one by the two
thus named;

(b) manner of presentation to the arbitrators, including provisions for time limitations within which hearings should be held and decision made;

(c) payment of expenses of the arbitration.

The questions which we suggest should be submitted to the arbitrators would be stated in such agreement for arbitration, and in our opinion should be stated substantially in the following form:

First: What are the obligations of the District and the contractor respectively under the contract and specifications for the construction of the Broadway Low Level Tunnel for the doing of any and all engineering work necessary to the performance and completion of the contract;

Second: Has the District done and furnished to the contractor since the commencement of performance of the contract for the construction of the Broadway Low Level Tunnel all of the engineering which it is obligated to furnish under the terms and provisions of the contract and specification covering the work;

Third: If it be found that the District has not furnished all of the engineering which it is obligated to furnish, what has been the extent of its failure in this respect, and what has been

(Testimony of Stephen Davidson Beehtel.)

the cost to the contractor for furnishing same;

Fourth: If it be found that the contractor has been doing and furnishing engineering work which should have been done and furnished by the District, responsibility for the same and the results thereof shall be determined as being upon the District, and the District shall likewise be held liable to pay to the contractor the cost to which it has been put as found by the arbitrators for doing and furnishing such engineering work.

Any award or decision of the arbitrators should be made binding upon both parties for the remainder of the life of the contract.

We trust you will be able to approve of the above program in order that the controversy now existing on the subject may be settled. We believe arbitration to be the preferable method of settling same as it can be quickly consummated and the expense thereof will not be prohibitive.

In the event that you are unwilling to submit the matter to arbitration, we will expect to immediately commence such legal proceedings as may be necessary or proper to determine our rights in the matter.

In order that a speedy settlement may be reached, we ask that you reply to this letter by August 7th, 1935. If we do not receive an affirmative answer by that date, we will consider

(Testimony of Stephen Davidson Bechtel.)

that you do not care to arbitrate the matter and commence such legal proceedings as may be proper, as above suggested.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By S. D. BECHTEL

S. D. Bechtel, President

cc—W. B. Boggs

cc—A. B. Tinning,

cc—T. M. Price.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Plff's Ex. No. 57; Filed April 22, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer. Deputy Clerk. [999]

Mr. Marrin: You may cross-examine.

The Court: It is Friday afternoon; if you are not prepared to proceed with your cross-examination, we can adjourn at this time.

Mr. Tinning: My theory on that, your Honor, is we could save time. I was not aware, of course, who was going to follow Mr. Larson. We have quite a lot of documents that I would like to get in order.

The Court: We will take an adjournment until next Tuesday morning at ten o'clock.

(Thereupon, an adjournment was taken until Tuesday, April 26, 1938; 10 o'clock A. M. [1001])

(Testimony of Stephen Davidson Bechtel.)

Tuesday, April 26, 1938;

10:00 o'clock A. M.

STEPHEN DAVIDSON BECHTEL,

Cross Examination

Mr. Tinning: If the Court please, we have a diagram or perspective drawing of the region of San Francisco Bay and the project of the District, which is drawn to perspective and was prepared from one of the architectural drawings that were used in connection with the proceedings in the formation of the District. This diagram is simply offered for the purpose of illustrating the testimony; it is not to scale; and it shows, between the points that I indicate on the east of the tunnel, generally, the extent of the District project, as marked in yellow; the highway is shown; the east portal building is shown; the east side of the hills; the west portal building; and the cut being generally shown; the west side of the hills; and then the highway leading down to Broadway in Oakland to the point where the yellow stops; that is the westerly termination of the District project, and to the cross or intersecting road known as the Landale Connection,—or whatever that short-cut from Berkeley is called,—across the main access of the project to East Oakland, known as the Landvale-Berkeley Connection.

For the purpose of some questions that I have in mind of the witness, I would like to offer that as

(Testimony of Stephen Davidson Bechtel.)

defendant's exhibit in proper order; and I understand there is no objection to it being put in for diagrammatic purposes to illustrate the testimony.

Mr. Marrin: No objection.

Mr. Wittschen: Mr. Tinning, from the distance here, I am sure the Court cannot see where the tunnels are.

Mr. Tinning: The dotted line—this being a perspective view, your Honor, of the country, the dotted line has been used to [1002] indicate the places where the tunnels are constructed between the west portal and east portal, running through under the hills. There is a dotted line above, higher up, which is intended to indicate the position of the Old Highway Tunnel, to which there has been some reference in the testimony, and the road which is shown by a white line meandering around the contour of the hills—and I am indicating from the west portal of the Old Tunnel down to the easterly boundary of Berkeley is what is known as the Old Tunnel Road.

(The diagram was marked "Defendant's Exhibit P.")

[Set forth in the Book of Exhibits at page 370.]

Mr. Tinning: Q. Mr. Bechtel, I understood from your testimony on last Friday that you resided in Oakland. Is that correct? A. Yes.

Q. How long have you lived in Oakland?

A. Off and on since 1912.

Q. You are familiar and have been familiar with

(Testimony of the Cont...
the Cont...
which the

A. I

Q. W...
tually cr

A. Y

Q. A

A. Y

Q. H

W. A. B...
plaintiff

A. S

Q. W

Q. W

business...
actually

A. N

school, c

Q. V

A. V

been ra...
practica

tion can

Army, c

Q. T

such th...
connect

A. Y

Q. Y

in wor

timony of Stephen Davidson Bechtel.)

Contra Costa-Alameda County hills, through
h the tunnel was built, for a great many years?

I have known they are there.

Well, I suppose, on occasions, you have ac-
y crossed over them?

Yes, I have crossed over them.

And gone through the Old Tunnel?

Yes.

How long were you a member of the firm of
A. Bechtel Company before the formation of the
tiff Six Companies of California?

Since its organization.

When was that? A. I believe, in 1925.

When did you first engage in the contracting
ness? From 1925—is that the time you started
lly working as a contractor—is that correct?

No. I started immediately on getting out of
ol, or before I got out of school.

When was that?

Well, it goes back to probably 1912; having
raised in construction camps, and having spent
tically all my life, since then, either in construc-
camps, around [1003] construction, or in the
y, or in school.

This experience goes back to 1912—Was it
that you have had experience in charge of or in
ection with the work of driving tunnels?

Yes.

What tunnels have you actively been engaged
orking on, prior to taking over the work of

(Testimony of Stephen Davidson Bechtel.)

preparing the bid for the Broadway Low Level Tunnel?

A. The Southern Pacific Company's Coram Tunnel near Redding.

Q. About what year was that?

A. About 1924 or 5.

Q. What kind of a tunnel was that?

A. Railroad tunnel that had burned out, caved in; and our contract was for the removing of the caved-in materials, and lining the same and restoring same to traffic.

Q. Prior to the fire, had it been a timber lined tunnel?

A. I think, at least in part.

Q. What kind of a lining did you restore?

A. Concrete.

Q. Did you employ a timbering operation?

A. Temporary timbering.

Q. Temporary timbering before you placed the concrete? A. In part.

Q. Did you leave the timber in behind the concrete? A. I believe so.

Q. Following your experience, about 1924, in the Coram Tunnel, what was your next tunnel experience?

A. Well, I believe, before that, that while I was still in school,—still in college,—I had worked on the Plumas County Tunnels of the Great Western Power Company; that was probably in 1922 or '23.

(Testimony of Stephen Davidson Bechtel.)

Q. The Western Pacific Tunnels in Plumas County?

A. I mean Great Western Power Company.

Q. Great Western Power Company?

A. Yes.

Q. Those were how large?

A. 10 or 12 feet in diameter, and some 5 or 6 miles in length.

Q. Those were driven through the Sierras?

A. Yes; they were in the Sierra Nevada Mountains.

Q. Hard rock tunnels? A. In part. [1004]

Q. Was there some heavy, heaving ground, soft materials, in those tunnels?

A. Not in the portion that we built.

Q. The Coram Tunnel that you referred to: did that present the same problems,—driving through hard rock or soft materials? A. Both.

Q. So, you had materials to cut through that were not self-supporting and materials that were, in the same tunnel? A. As I recall.

Q. In what capacity were you employed on the Coram Tunnel work?

A. Well, it was what you might call resident partner. I was participating in the company, or in my father's business; it was carried on as an individual, and I was a junior partner.

Q. You had an interest in the operation?

A. Yes.

Q. Following the Coram Tunnel operation, what was your next experience in tunnel work?

(Testimony of Stephen Davidson Bechtel.)

A. I believe it was the Southern Pacific American Canyon double tracking, which was about 1925; somewhere around there; and it consisted of—I presume you want me to give the same information on that tunnel?

Q. Yes, just generally.

A. That consisted of concreting, under traffic, a railroad tunnel.

Q. That was in the Sierras?

A. In the Sierras.

Q. What was your next experience after that?

A. In 1926, I was in Oregon, again as resident partner up to the time we were organized, but it was not organized as "resident partner"; it consisted of concrete lining and timbering and retimbering of eight tunnels on the Cascade Line of the Southern Pacific.

Q. Then, following that experience in 1926, what did you do next in connection with tunnel work?

A. Well, next to this same operation, I was also in charge for our company of the handling of the Chicago Pneumatic placing equipment; that is a concrete gun,— [1005] predecessor, I believe, one might call it, to the Hackley gun; and which we handled, and represented the Chicago firm on the Pacific Coast; and I handled that business in our office.

Q. In handling that business, did you have to do with the problem of placing concrete in linings in tunnels?

(Testimony of Stephen Davidson Bechtel.)

A. Well, we were licensees, Western representatives and sole licensee, and issued sub-licenses to the various users of the Pneumatic gun.

Q. In your work, did you come in contact with the problems of the actual men who were using this equipment in placing concrete in tunnel linings?

A. Very indirectly, Mr. Tinning.

Q. Following that work in connection with the Southern Pacific Tunnels in the Sierras Nevadas, what was your next experience with tunnels?

A. Well, probably my next direct contact was at Boulder Dam, at which point I was on the Executive Committee of the Board of Directors, and was directly in charge of the procuring of equipment, materials and supplies for the entire project, including the tunnel portions, and, as such, reviewed with the other members of the Executive Committee,—all of whom were Directors,—the matters of planning and equipping the Boulder Dam Tunnels.

Q. Those tunnels were how large, Mr. Bechtel?

A. The finished diameter was approximately 50 feet.

Q. The excavation, outside the permanent lining?

A. Minimum of approximately 56 feet in diameter.

Q. So that the lining was how thick?

A. I would say an average of approximately 3 feet.

Q. Concrete lined? A. Yes.

Q. How high were the tunnels?

(Testimony of Stephen Davidson Bechtel.)

A. They were circular; 56 feet high and 56 feet wide, before lining, approximately.

Q. Well, were those tunnels, throughout, circular?

A. Practically throughout, except a slight transition period where the spillway [1006] overflowed, came into the tunnel; but the main bodies of the tunnels proper were circular.

Q. Were those tunnels driven by the full face method, with the Jumbos and drifters?

A. In major part.

Q. Did they require timbering?

A. Very little, if any.

Q. Was the timber left in behind the concrete?

A. There was very little timbering placed, so it could not have been left in.

Q. How many lineal feet of those tunnels was that?

A. As I recollect, approximately 4 tunnels; and they were approximately 4000 feet long, each; that is an approximation.

Q. Those were driven in a hard rock of the type of the mountain, or high mountain rock, were they not?

A. Not necessarily.

Q. Well, I am asking you whether they were or not, Mr. Bechtel.

A. Will you repeat the question?

The Court: Read the question.

(Pending question read by the reporter.)

The Witness: A. In part.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: Q. Is there any soft ground in the Boulder Tunnel—Boulder Dam Tunnels?

A. Very little.

Q. And the formation was quite different from anything encountered here in the Coast Range Mountains in the vicinity of San Francisco Bay?

A. Generally speaking, yes.

Q. Mr. Bechtel, I call your attention to Thursday, the 15th day of September, 1932, and ask you if you recollect a visit to the office of Wallace B. Boggs, District Engineer of the defendant Joint Highway District, at its office at 1448 Webster Street, in Oakland, California, at which time your father, —W. A. Bechtel, —yourself, your brother Warren Bechtel, Junior, J. B. Shaw of the W. A. Bechtel Company, visited that office and had a conference or a conversation with Mr. Boggs, at which time the District Assistant Engineer, [1007] Joseph Barkley, was present—Do you remember that incident? A. No.

Q. Shortly after Mr. Boggs was appointed District Engineer, after Mr. George Posey's death?

A. Might I—

Q. Well, do you remember the incident, Mr. Bechtel?

A. Yes, except as of a specific date, Mr. Tinning; I have no recollection of a specific date; but that is—When I say that, that is the reason. You asked whether I remember a specific date.

(Testimony of Stephen Davidson Bechtel.)

The Court: Q. Do you recall a meeting, with those men present that he has enumerated, at any time?

A. I recall a meeting and discussion with Mr. Boggs.

Q. When was that, as near as you recall?

A. During 1932.

Q. Who was present at that meeting?

A. My father, my brother, —W. A. Bechtel, Junior, —Joseph Shaw, myself, and, to the best of my recollection, Mr. Wallace Boggs, only.

Q. Was that the first meeting you had with him?

A. To the best of my recollection.

The Court: Proceed.

Mr. Tinning: Q. You went over there to discuss with Mr. Boggs the type of tunnel, the general plans that he might have for the construction of this project for which he had just been employed as District Engineer?

Mr. Marrin: We object to any evidence of this conversation, on the ground it is incompetent, irrelevant and immaterial, and it is too remote in time; it is not binding on this plaintiff. The evidence shows that this plaintiff was not organized until May 15, 1934; and an attempt is being made to bring out here evidence of a conversation which occurred more than a year and a half prior to that time.

Mr. Alexander: I join in the objection. [1008]

Mr. Wittschen: I will state, if the Court please,

(Testimony of Stephen Davidson Bechtel.)

we will tie it right in to this witness's testimony wherein he said he relied upon the estimate of Mr. Larson and Mr. Larson's interpretation of the geological report; and we will show a conversation with the late Mr. Bechtel,—the witness's father,—relating to the original construction of this tunnel, and his knowledge; and, of course, the witness's knowledge of conditions, because the witness was present.

Mr. Marrin: I would like to state the further ground of the objection is that at the time there had been no call for bids for this project, no showing that there was any definite project or that the plans and specifications had been prepared, or that there had been any call for bids or any public request for this contract at all.

Mr. Wittschen: If we can show a knowledge of conditions in 1932, certainly that knowledge ran through to 1934. The fact the company was not organized is immaterial. These people put in all sorts of evidence to the effect that, before the company was organized, Mr. Larson was working for Mr. Bechtel.

Mr. Marrin: All of that evidence related to matters which occurred after the first call for bids and after they got the plans and specifications that were issued by the defendant in connection with the particular project.

Mr. Wittschen: We offer to prove the knowledge of the witness of the conditions under which the

(Testimony of Stephen Davidson Bechtel.)

tunnel would be driven and which he knew before the bid was made.

The Court: The Court will allow it for the limited purpose of the offer.

Mr. Marrin: Exception.

Mr. Alexander: Exception.

Mr. Tinning: Q. At that time and place, Mr. Bechtel, did you hear your father state to Mr. Boggs and the people present that, [1009] in his opinion, a large tunnel bore through the Alameda-Contra Costa County Tunnel, at the point where the tunnel was proposed to be constructed, would present many hazards?

A. I have no such recollection, and I do not believe it was said.

Q. Did you further hear him state, in this conversation, that often smaller bores would encounter trouble sections, particularly if swelling ground were encountered?

A. I have no recollection, and I don't believe he said that.

Q. Did you hear your father state, in that conversation, that he did not like arch invert in tunnels of small sections, except where they sometimes were necessary to hold a rising floor?

A. I have no such recollection, and I do not believe he said that.

Q. Did you also hear, in that conversation, Mr. Bechtel, your father state that, in his opinion, the bid price of the twin bore tunnels of small sections

(Testimony of Stephen Davidson Bechtel.)

would be lower than the bid price for a larger single bore tunnel, even though the quantity of excavation and concrete for both types of tunnel would be equal?

A. I have no such recollection. I do not believe he could have said that.

Q. In the same conversation, did you hear your father state that he would not want to bid at all on a larger section, because of his knowledge of the hill through which the tunnel would be driven?

A. May I have that question?

Mr. Tinning: Read the question, please.

(Pending question read by the reporter.)

The Witness: A. No.

Mr. Tinning: Q. Did you, on that occasion, hear your father state that he did not think that a pioneer or exploration bore was necessary, or that the same would be of any particular advantage except for the purpose of determining which type of tunnel bore [1010] should be used?

A. No; and I don't think he said that.

Q. What did he say, at that conversation, Mr. Bechtel?

A. I have no recollection of what he said.

Q. Your only recollection is that you were present some time in 1932, at Mr. Bogg's office, and that office is the same office where the District is now domiciled over on Webster Street; that is the only thing you recollect about it?

(Testimony of Stephen Davidson Bechtel.)

A. No; I have some recollection of that discussion.

Q. Well, what was said at that time and place?

A. Not that clear a recollection of what was said; but the discussion that was of a preliminary nature only. We went there for the purpose of asking whether there was going to be a tunnel construction contract available. Our general interest in such things—and we were interested in various projects, wherever they might be; and there were no plans or specifications. I, personally, had never been on the job site, and I don't think my father or brother had been to the job site; and it was of a preliminary nature of the kind a contractor makes, or engineer would make, in thinking of a prospective project some time in the future.

Q. And, in thinking of the prospective project some time in the future, at that time you knew that Mr. Boggs had just come on the work as District Engineer, Mr. Posey having died in August, 1932?

A. I did not know that.

Q. Will you repeat what was said at that conversation, so well as you can, saying what was said by you and your father and Mr. Boggs?

A. Mr. Tinning, I tell you I don't recollect what was said.

Q. You don't recall that? A. No.

Q. In 1933, did the W. A. Bechtel Company subscribe to the Western Construction News?

A. I presume that it did.

(Testimony of Stephen Davidson Bechtel.)

Q. You said you had gone to Mr. Bogg's office for the purpose of finding out that work that might be coming up. Do you recollect [1011] reading the article, in July, 1933, in the Western Construction News, describing the project?

A. I have no such recollection. [1012]

Q. Do you remember reading the matter on page —

Mr. Marrin: I object to your reading the article in evidence. You can show him the article and ask him if he read it. If he has not read it I object to it being read into the record.

Mr. Wittschen: I think we have a right to offer it, because he has not said he is not a subscriber to the Western Construction News. I am satisfied if the witness said he was a subscriber that we have a right to introduce the article.

Mr. Marrin: That is not the point. He has not seen the article, and I object to the article being read in evidence in this case, or into the record, until it is offered.

Mr. Tinning: I do not understand that the witness testified that he has not seen it, he said he did not remember it.

Mr. Marrin: I would like you to develop it, and when you offer it I would like it offered before you read it, so that I may have a chance to object to it.

Mr. Tinning: I am not asking you whether you saw it at that time, I am asking whether you see it right now.

(Testimony of Stephen Davidson Bechtel.)

A. I see it right now. However, I will state that——

Q. Just a minute, I have not asked you any question yet. Isn't it a fact that in 1933, following the publication of this article, that you saw it?

A. I have seen it this morning.

Q. Will you read the question, Mr. Reporter?
(Question repeated by the reporter.)

A. No.

Q. Do you have any recollection of having read this article or the portions thereof which I will now read to you——

Mr. Marrin: That is my objection, to his reading the article.

The Court: I will allow him to make a record. Let us proceed in the regular way. Let him conclude the question and it will be [1013] time enough then to object.

Mr. Tinning: Q. (Continuing) Reading from page 318 of the issue of July, 1933, Western Construction News and Highway Builder:

“Both tunnel sections will be 35 feet out to out in excavation and 34 feet high. A reinforced concrete lining will be placed throughout, varying from 2 feet thick at the crown of the arch to 5 feet at the haunch. The tunnel is expected to require support for practically the entire length of each bore, and the contractor will be allowed to place either timber sets and lagging or steel ribs and liner plates back of the con-

(Testimony of Stephen Davidson Bechtel.)

crete. Where practicable, the upper part of the arch is to be poured last, so as to key the tunnel structure. Concrete specifications are based upon cement content and slump."

"Two types of tunnel are provided in the design: Type 'A', with no invert, the walls coming down to spread footings on rock and the 8-inch Portland cement concrete pavement resting directly on the excavated sub-grade; and type 'B', carrying an invert, for use, if ground conditions are unfavorable."

A. No, I have no recollection of ever having read them.

Mr. Tinning: We will offer them in evidence, if your Honor please.

Mr. Marrin: To which we object on the ground they are immaterial, irrelevant and incompetent, and on the further ground that they are hearsay.

Mr. Alexander: We join in the objection.

Mr. Wittschen: In that connection, this is an engineering publication that is published in San Francisco, and he has not said that his firm were not subscribers, in fact, he has practically admitted that they were, anything as notorious as that about this [1014] project, is admissible as general knowledge.

Mr. Marrin: This witness has testified he has not seen or read the article and it is simply a newspaper article.

The Court: At this time the Court will sustain

(Testimony of Stephen Davidson Bechtel.)

the objection on the ground the foundation has not been laid.

Mr. Tinning: Q. Isn't it a fact that the W. A. Bechtel Company was a subscriber to the Western Construction News and Highway Builder in the month of July, 1933?

A. I believe that it was, Mr. Tinning, I am not sure, but I presume that it was.

Q. Didn't you have copies of this engineering publication in your office and keep them there?

A. Some publications.

Q. How about the Western Construction News and Highway Builder?

A. Well, I presume that if we were subscribers at that time it probably was in the office and probably was kept there.

Q. Then my understanding is that you, yourself, have no knowledge of whether it was there, you simply presume that it was?

A. I presume that we were subscribers at that time.

Mr. Tinning: We make the offer again, your Honor.

Mr. Marrin: I will renew the objection, and the further ground that no proper foundation has been laid.

Mr. Alexander: The same objection for the Surety Companies.

The Court: At this time the Court will sustain the objection on the ground heretofore stated.

(Testimony of Stephen Davidson Bechtel.)

Mr. Wittschen: Exception.

Mr. Tinning: Mr. Marrin, I will show you a copy of a letter dated July 20, 1934, from Six Companies of California to Wallace B. Boggs, District Engineer, and I assume that under the understanding we have previously had I may introduce a copy rather than the original, subject to check.

Mr. Marrin: Surely.

Mr. Tinning: If your Honor please, we offer in evidence the [1015] letter referred to, dated July 20, 1934, from Six Companies of California, signed S. D. Bechtel, President, to Wallace B. Boggs, District Engineer, as Defendant's Exhibit in proper order.

The Court: It may be admitted and marked.

(The letter was marked

"DEFENDANT'S EXHIBIT Q.")

Mr. Tinning: The letter reads as follows:

"Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
Oakland, California.

"Dear Mr. Boggs:

"We wish to advise you of the organization we are using in the field for the construction of Broadway Tunnel.

"W. R. Fontaine is in complete charge of all field operations.

"L. M. Larsen is superintendent in charge of tunnel operations.

(Testimony of Stephen Davidson Bechtel.)

"J. F. Barber is superintendent in charge of outside and subcontracted operations.

"Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (Signed) S. D. BECHTEL,

President."

Q. Referring now to Defendant's Exhibit N, Schedule of Progress submitted on August 9, 1934, showing the work of excavation at the west portal which commenced on July 20, 1934, Mr. Bechtel, so that you may have this before you I will show you a copy of what is Defendant's Exhibit N in the case, and ask you if this is a construction schedule that was presented by Six Companies to the District with its letter of August 9, 1934, that is already in evidence? A. Yes.

Q. And I will ask you if at that time didn't your proposed construction schedule show that you proposed to commence the construction at the west portal on the 15th of July, 1934?

A. Well, I think it shows whatever we were thinking of at that time. [1016]

Q. Will you look at it, please, and see if it is not a fact that it does show that?

A. It shows about the 20th.

Q. The 20th?

A. Yes, the 20th of July, 1934.

Q. From this schedule, which is already in evidence as Defendant's Exhibit N, it is true, is it not, Mr. Bechtel, that prior to the time that this schedule

(Testimony of Stephen Davidson Bechtel.)

was submitted on the 9th of August, 1934, that there already had been slides in the west portal cut area?

A. I don't recall whether there had been or had not been at that time.

Q. You don't recall that? A. No.

Q. You don't recall that as early as July 13 there had been slides in that area? A. No.

Q. You don't recall that the plaintiff in this case, the Six Companies of California, had made any written complaints to the District at this time that it had been deceived by the geological report or deceived by the condition which it had actually encountered there?

A. Would you read that question?

(Question repeated by the reporter.)

I do not recall that.

Q. Well, you have been over the records of the company. Did you find anything or do you know now of any written complaint that was made by the Six Companies to the District at this time, August 1, 1934, or at the time that the schedule was submitted on the 9th of August, 1934, where Six Companies contended in writing that it had been deceived or misled?

A. Well, I probably had better say I have not been over all of the records of the company, Mr. Tinning.

Q. Do you know of any complaints that were made?

A. I can't remember at this time.

(Testimony of Stephen Davidson Bechtel.)

Q. You have no recollection? A. No.

Q. Was there any demand made for extra compensation for the slides [1017] at the west portal of the tunnel at this time?

A. At that date?

Q. Yes.

A. I have no recollection on that subject.

Q. Isn't it a fact, Mr. Bechtel, that the work on this west portal, the open cut, the west portal cut, the foundation walls and the construction of the building was sub-contracted by Six Companies of California to subcontractors very shortly after Six Companies entered into this contract with the district?

A. You are speaking about the building, the excavation for it?

Q. The building and the excavation for the westerly portal cut, both? A. Yes, in part.

Q. Will you explain?

A. The portal buildings were subcontracted; the grading was subcontracted in general, and that subcontract for grading was slightly modified thereafter.

Q. Do I understand when you say the grading, that you are referring to the grade of the project from Broadway up to the west portal and from the east portal to the east end of the project?

A. It was intended to subcontract all outside excavation there.

(Testimony of Stephen Davidson Bechtel.)

Q. Was that done shortly after you took the contract? A. Yes.

Q. So that at the time that work started at the west portal cut the work was being done by subcontractors? A. Yes.

Q. Of your own selection? A. Yes.

Q. And the manner and the order in which they proceeded was a matter which had been determined by Six Companies in the contract which it had made with the subcontractors?

A. Substantially, yes.

Q. Any interference with the tunnel-driving operations of the Six Companies was due to the subcontractors' operations at the west portal, was it not, at the time? A. In part.

Q. It was true, was it not, that you had to stop work on the attempt to get underground in the tunnel which was started about the [1018] 6th of August, because one of the contractors, K. E. Parker, protested that you were interfering with their work under their contract?

A. No, I think you are confused on that, Mr. Tinning. It is my recollection that the schedule of that work and the work, itself, as of such a nature and had to be carried on in such a fashion that certain parts could not be carried on simultaneously, and at our suggestion certain parts of the several subcontractors' work were delayed to correlate and to synchronize, so that we could make the maximum speed possible.

(Testimony of Stephen Davidson Bechtel.)

Q. Mr. Bechtel, isn't it a fact that the efforts to go underground made by Six Companies who had not subcontracted the tunnel driving were stopped from August 3 to August 23 while the K. E. Parker Company was permitted to go ahead in the construction of the foundation work under the building?

A. I don't remember that.

Q. So that any interference that resulted to the Six Companies from their attempt to start the driving of this tunnel was the result of subcontractors being there, was due to the fact that Six Companies had brought subcontractors there?

A. In part.

Q. What do you mean by in part?

A. Well, as any construction project goes ahead there must be a certain synchronization of the operations, and particularly in starting an underground tunnel, when it is in a cut of that kind, that is what I mean when I say in part.

Q. There was no synchronization during the period of twenty days, approximately, that the work was held up from going underground, was there?

A. I am speaking of it in general from the time we started the excavation of the portal, the excavation for the building, up to and including the final completion of the building.

Q. I am speaking specifically with respect to the work in this case, the work was shut down from about August 3 to August 23, driving [1019] underground, getting started in the tunnel underground,

(Testimony of Stephen Davidson Bechtel.)

because your subcontractor, K. E. Parker, was in the way: that is a fact, is it not?

A. I would not say so. As I say, my recollection of dates and sequence of operations is not clear, is not specific, I could not recall particular dates.

Q. You have not a distinct recollection of the sequence? A. That is right.

Q. You would not say that was not true, that you were held up between August 3 and August 23 by reason of the fact that you ceased work while K. E. Parker Company had got the foundations in?

A. No, but the constant effort of the Six Companies of California was to bring about a condition of complete installation and operations to expedite the tunnel construction as far as possible at all times, and that had to be synchronized and correlated with the other parts of the work, approach excavation, the construction of the portal building, and other operations.

The Court: Were you familiar with this work during this period? A. Yes.

Q. Was there any delay in that period?

A. Yes, there was delay.

Q. What was that delay caused by?

A. By the nature of the work.

Q. His question indicates that you sublet the contract to the approaches up to the face of the tunnel, is that correct? A. It is.

(Testimony of Stephen Davidson Bechtel.)

Q. In that event there were subcontractors there?

A. Yes.

Q. And delay caused in the tunnel? A. Yes.

Q. Counsel is trying to check the delay of 20 days, are you familiar with that? A. No.

Q. What were you doing during that time?

A. I was there from time to time; I do not recall the sequence of events.

Q. You have no recollection of it, at all?

A. Not of the dates. [1020]

Q. They have here a schedule of the progress of the work, are you familiar with that?

A. I recall their schedule.

Q. I suppose it is not only their schedule, but both sides.

Mr. Tinning: That is a schedule submitted by the Six Companies of California, the plaintiff in this case, on the 9th of August, 1934.

The Court: I am anxious to make headway. I have seen too much going on—if this case is going to be presented on the merits you had better get to the question at issue. You were there on the work, what was the situation?

A. Well, you say I was on the work. I was President of the Six Companies, I was there occasionally, several times a week, practically, throughout the entire construction.

Q. You were familiar with your own records, weren't you? A. Yes.

The Court: What is this record?

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: That is a proposed schedule. Mr. Larson testified that they were shut down from the 3rd of August to the 23rd of August because of interference with the work of K. E. Parker, and that they did no tunnel driving during that period.

The Court: What is your knowledge?

A. There was interference with the tunnel construction, that is correct.

Q. Who was it caused it?

A. Partly K. E. Parker, and partly McKinley & Crowell, and partly our own operations.

Q. Was that the interference that caused the delay in the bore of that tunnel? A. Yes.

Q. What delay did it cause?

A. Mr. Tinning said it was a period of approximately 20 days.

Q. I am not concerned with what he said. I want your knowledge. You are the witness on the stand now. What is your knowledge?

A. I have no clear recollection of the delay involved there. [1021]

Mr. Tinning: Q. I show you a letter dated September 25, 1934, from Six Companies of California to Mr. Wallace B. Boggs, District Engineer, which I propose to offer in evidence under the understanding that we will produce copies subject to check.

Mr. Marrin: No objection.

Mr. Tinning: If your Honor please, we offer in evidence on behalf of Defendant a letter dated Sep-

(Testimony of Stephen Davidson Bechtel.)
tember 25, 1934, addressed by Six Companies of California to Wallace B. Boggs, District Engineer, Joint Highway District No. 13, Oakland, California, and ask that the same be received in evidence as Defendant's Exhibit next in order.

The Court: It may be admitted and marked.

(The letter was marked

"DEFENDANT'S EXHIBIT R.")

Mr. Tinning: I will read the letter. It is dated September 25, 1934.

"Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
Oakland, California.

"Dear Mr. Boggs:

"In the future in addressing communications to our field office with reference to the Broadway Tunnel Project, please mark them for the attention of Mr. T. M. Price, who assumed the position of Project Manager on September 20.

"Mr. W. R. Fontaine has assumed an advisory relationship in connection with the job.

"Yours very truly,

**SIX COMPANIES OF
CALIFORNIA,**

(Signed) S. D. BECHTEL,

President."

(Testimony of Stephen Davidson Bechtel.)

Q. Mr. Bechtel, directing your attention to the way in which the work was set up prior to September 20, 1934, following your taking the contract, it is a fact, is it not, that a railroad was constructed from the west portal down grade approximately 2500 feet along the right of way of the District, from the point approximately [1022] I am pointing to on this diagram, which, as near as I can estimate, is approximately the 2500 feet that I have spoken of.

A. No. I do say that there was a dinkey track, a narrow gauge track, constructed on a down hill grade, but I do not think it is 2500 feet.

Q. Is it true that it was approximately from station 111 west to station 85?

A. I do not think it went that far.

Q. That would be subject to check with the records?

A. It may have been.

Q. It is your impression it was not quite as long as that? A. Yes.

Q. That railroad was designed to convey the tunnel muck from the mouth of the tunnel down grade and deposit it in the fill, in the highway fill, or in the dump, if it was not required for the highway fill?

A. That was the method for the purpose of transporting it down and putting it in the highway fill; I do not believe that was constructed for the dump operation.

(Testimony of Stephen Davidson Bechtel.)

Q. At any rate, it was to dispose of the material which was taken out of the tunnel?

A. Yes.

Q. There were a couple of trestles built on this railroad track, were there not, across the ravines?

A. I remember one ravine.

Q. You remember one? A. Yes.

Q. The there were some diesel locomotives supplied for this railroad? A. There was one.

Q. One Diesel and one gas?

A. There was one Diesel and one small gasoline; the gas locomotive was used to switch the cars in the tunnel face.

Q. That railroad caused considerable difficulty in operation, did it not, the trains and locomotive ran off the tracks, going down the grade?

A. I remember of that having happened a number of times.

Q. After Mr. Price came on the job he immediately began preparation [1023] for the construction of a muck bunker near the west portal and the elimination of the railroad from the west portal down to the point where it had formerly been operated?

A. The date of that I do not recall, but it was done in the forepart of the job.

Q. What is that?

A. That was done in the forepart of the job.

Q. It is a fact that it started immediately after Mr. Price got on the job? A. I do not recall.

(Testimony of Stephen Davidson Bechtel.)

Q. And that by October the method of transporting muck, or the middle of October the method of transporting muck had been changed and the material from the tunnel was hauled out of the tunnel to a point 200 or 300 feet west of the tunnel portal by the locomotives, and there dumped into a bunker, which was placed higher than the tunnel grade, and from that bunker put into trucks and carried down and put into the right of way?

A. Yes, I believe that was done, because of the different kind of material that was encountered, it was a different material than was anticipated, a different material than we originally contemplated, and furthermore, I believe that the fill at the point under the trestle you referred to was completed.

Q. Those fills were completed by the open cut subcontractor, were they not?

A. No, I do not think so. I think some tunnel muck was delivered into that.

Q. Isn't it a fact that through the month of October the only tunnel excavation that had been done was the removal of the muck or dirt from the drifts in approximately 92 feet in the south tunnel and approximately 110 feet in the north tunnel, and that the cores, the bulk of the excavation from these bores of the tunnel was not removed until after December 1, 1934?

A. I think that is correct, Mr. Tinning. If my recollection is correct there was a certain portion of the tunnel which was constructed by an open

(Testimony of Stephen Davidson Bechtel.)

cut [1024] excavation in the case of the portal building, a small distance away from the face, and there was some feet of construction between the portal building and the point they went underground.

Q. Perhaps we understand each other. It is your impression in October that that material was removed and hauled down the highway by this railroad?

A. No, that is not correct. The material that was hauled down by this railroad was material from the drift, I presume, that is my recollection.

Q. The matter of whether or not some other material was taken out of this open cut does not have to do with the matter I am discussing. I am discussing the use of the railroad, and it is a fact, is it not, that it was only used to haul the dirt that came out of the drift and that no other dirt was taken out of the excavated or driven portions of the tunnel except that dirt that came out of the drifts say in this first 100 feet in each tunnel, prior to the 1st of December, 1934?

A. I presume that is correct.

Q. And the muck bunker was used in the operation in the latter part of October, 1934 and the railroad was abandoned?

A. I don't recall the date.

Q. There was considerable time lost during the excavation of those drifts because the railroad was tied up and could not move that muck out?

(Testimony of Stephen Davidson Bechtel.)

A. I do not think so.

Q. You do not think so? A. No.

Q. Mr. Bechtel, I am going to show you a letter dated September 28, 1934, from Six Companies of California—this is a copy which, under the understanding we have had here, we wish to introduce, and we now offer in evidence a letter dated September 28, 1934, from Six Companies of California, addressed to Joint Highway District No. 13, which reads as follows:

[Set forth in the Book of Exhibits at page 371.]

[1025]

We offer the letter and attached documents in evidence as Defendant's Exhibit S.

The Court: They may be admitted and marked.

(The documents were marked "Defendant's Exhibit S.")

Mr. Tinning: Q. Will you examine the copy of this exhibit which I hand you, Mr. Bechtel, and which shows instead of 40 feet proposed operation going underground as Mr. Larson testified, 100 feet is proposed to go underground, that is true, is it not?

A. I might say, Mr. Tinning, I have never seen this before.

Q. Will you look at it and state whether my statement as to this diagram of the tunnel is correct? Will you look at the bottom of the page, and see if the original tunnel operation is 100 feet?

A. Plus or minus.

(Testimony of Stephen Davidson Bechtel.)

Q. Plus or minus? A. Yes.

Q. In other words, whatever distance was necessary within 100 [1026] feet? A. Yes.

Q. That is correct, is it not? A. Yes.

Q. It is a fact, is it not, Mr. Bechtel, that at this time Six Companies made no objection in writing to the fact that the distance which was necessary to operate under the procedure shown by this diagram was in excess of 40 feet?

A. I presume that is correct.

Q. You don't know of any objection, do you?

A. I don't know of any objection.

Q. You were president of the company?

A. Yes.

Q. Was any claim in writing made to the District for 60 feet of extra work or cost shown on this diagram?

A. None that I know of at this time.

Mr. Tinning: I will now offer in evidence a letter in copy form addressed by Six Companies of California over the signature of S. D. Bechtel, President, on the 18th of October, 1934, to Hon. T. A. Reardon, Director of the Department of Industrial Relations, State Building, San Francisco, California. I now offer this letter in evidence as Defendant's Exhibit in proper order.

The Court: It will be admitted and marked.

(The letter was marked "Defendant's Exhibit T.")

Mr. Tinning: I will read it. It is dated October 18, 1934. [1027]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT T.

October 18th, 1934

Honorable T. A. Reardon,
Director of the Department
of Industrial Relations,
State Building,
San Francisco, California.

Dear Sir:

We are now engaged in the performance of our contract with Joint Highway District No. 13 of the State of California for the construction of the project, including highway, highway tunnel and approaches, with appurtenant structures, commonly referred to as the Broadway Low Level Tunnel. We respectfully request that you examine said Project and determine, as to that portion hereinafter referred to, that the application of the provisions of Section 653c-1 of the Penal Code is impracticable.

This request is not intended to apply to the entire project, but only to that part having to do with the tunnel proper, including, however, certain operations incidental to the construction of the tunnel which are carried on outside the tunnel and at the portals. These outside operations involve certain plant facilities, such as compressors, electrical shop, concrete mixing plant, carpenter shop, and tunnel muck dis-

(Testimony of Stephen Davidson Bechtel.)

positional work. In this connection we desire to point out that the work on the portion of the project which we have referred to covers only about 50% of the work on the entire project and that no request is made as to the balance.

We request that as to the portion of the project which we have described above, we be permitted to operate on a 48-hour week in lieu of a 30-hour week. In making this request we desire to point out that the only matter involved here is the question of the hours of labor and that the wage scale provided for in our contract with the District will be fully complied with.

In support of this request, we desire to submit the following facts to you:

In carrying out our contract with the District it will be necessary for us to construct two twin bores, each approximately 3,000 feet in length and 36 feet in diameter. While a project of this size does not permit an accurate analysis or forecast as to the type and formation of the ground through which the tunnels are to be constructed, it has now become apparent, and our engineers are of the opinion, that in the main the tunnels will not be constructed through hard rock but rather through comparatively soft earth and rock for a considerable distance. As a result of this condition, the hazards in connection with the construction of

(Testimony of Stephen Davidson Bechtel.)

the tunnels will be greatly increased. These hazards involve not only the safety of the project, but also the safety of all of the men employed in the performance of the work.

To this hazardous factor there must also be added an additional hazard due to the size of the tunnel. Experience has shown that as the dimensions of a tunnel increase, the hazards increase in a much greater proportion. Accordingly, considering the size of the tunnels and the type of material which we have encountered, it is our belief that the construction of the tunnels will be extremely hazardous.

Under these circumstances, it is essential that we have available at all times thoroughly competent and experienced men and that insofar as possible all conditions tending to increase the hazards be eliminated. In performing our work, therefore, we feel that we cannot use inexperienced men. Quite to the contrary, it is extremely important that we have a small number of crews the members of which are all experienced and skilled.

In connection with the number of crews, we desire to point out that the more frequent the changes in crews, the greater the hazards. Here, again, experience has shown that it is essential that tunnel construction work be as continuous as possible. While it is true that in certain types of work a frequent change of crews

(Testimony of Stephen Davidson Bechtel.)

tends to decrease the possibility of accidents, a contrary rule applies to tunnel work. The various operations in connection with the construction of a tunnel, involving drilling, shooting and mucking, can be carried on with best possible correlation and safety by the use of a limited number of crews working on at least an 8-hour basis. This is particularly true in soft ground tunnels where heavy timbering is required, for in such situations the use of a minimum number of shifts and men cannot help but diminish the possibility of a catastrophe to the tunnels and the workmen.

So far as an adequate supply of experienced men is concerned, we must point out that the fact that a tunnel is being constructed near a metropolitan area does not of itself lead to the conclusion that an adequate supply of competent workmen can be obtained. Experienced tunnel workers are of necessity a roving type of workmen, since they move about the country from project to project and are obtainable only from the various available tunnel labor markets. Consequently, it cannot be expected that even in cities of the size of Oakland or San Francisco any appreciable number of experienced tunnel men can be obtained, for the simple reason that this type of construction rarely occurs in this locality.

(Testimony of Stephen Davidson Bechtel.)

The condition of the tunnel labor market is further aggravated at the present time, so far as the Broadway Low Level Tunnel is concerned, because of the fact that several major tunnel construction jobs are now being performed on the Pacific Coast, and particularly in this State. It is to be noticed that a major project is now being carried out in the southern part of the State by the Metropolitan Water District. On this project the tunnel workers have been permitted to work 56 hours and due to this attraction to the workmen a great number of them have already been engaged in the performance of that job. The Fort Peck Project in Montana, on which the men are permitted to work in excess of 30 hours per week, has also drawn a considerable number of tunnel men from this region. Incidentally, it is our belief that most of the men who were engaged in the Hetch Hetchy work have already left this region and secured employment on the projects which we have mentioned. It is obvious that we cannot expect to obtain for our work men of experience and ability while we are restricted to a 30-hour week, when other similar projects are being carried on under conditions offering the men more attractive hours of labor, for the men naturally go to those projects where they can receive the greatest income.

The available supply of experienced labor has

(Testimony of Stephen Davidson Bechtel.)

been further diminished at the present time because of the revival of activity in the mining industry throughout the West. Due to this condition many experienced tunnel men have been removed from the available supply of labor in this State, and additional numbers will continue to engage in this industry because of the fact that they may obtain employment for a greater number of hours per week than is permitted on our project at the present time.

The situation confronting us in the employment of qualified labor for the construction of the tunnels is comparable to one of the situations as to which, under the Code of Fair Competition for the Construction Industry, a 48-hour week rather than a 40-hour week is permitted. In subdivision B, 1, (c) of Section 2 of Article III of that Code, it is provided that "on projects in localities where a sufficient amount of qualified labor is not available in the immediate vicinity of the work" an exception to the general code provision as to hours of labor may be made. In our work on the Broadway Low Level Tunnel we have encountered extreme difficulty in procuring a sufficient number of qualified and experienced tunnel men. The employment of inexperienced men increases the labor turnover, as a result of which the factors of safety are materially reduced

(Testimony of Stephen Davidson Bechtel.)

and the efficiency of the entire project is impaired.

On the basis of these facts, we request that you examine the Broadway Low Level Tunnel Project, determine that as to that portion to which we have referred the application of the provisions of Section 653c-1 is impracticable and that a 48-hour week be authorized for such work. We shall be glad to furnish any additional information that you require and to give you any assistance that may be necessary in order to permit a determination of this matter. Your early attention to this request is earnestly solicited.

Respectfully yours,

SIX COMPANIES OF
CALIFORNIA,

By

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. T. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

The Court: We will take a recess for a few minutes. [1032]

(After Recess)

Mr. Tinning: Q. Mr. Bechtel, when Six Companies of California bid on this work, you knew

(Testimony of Stephen Davidson Bechtel.)

that both the law of the State of California and the PWA regulations provided that the men who worked on the job could not work more than 30 hours per week? A. Yes.

Q. You also knew that all of the men who worked on the job had to come either through the National Reemployment Office or, if you desired to make the job 100 per cent Union, through the Unions? A. Yes.

Q. You also knew that, under the Union method of calling men, if the Unions in the region where the work was to be done could not supply men, you could call men anywhere in the United States and they could go to work on this job and join the Union? A. Yes.

Q. You selected, at the onset of your work, to take your men through the National Employment Office? A. Yes.

Q. And, with the kind that you selected, you encountered the difficulties which you refer to in your letter of October 18th, with respect to experienced men?

A. I think that was subsequently modified, Mr. Tinning, and men drawn through both sources.

Q. I am talking now of the October letter. You were drawing men through the National Reemployment Service at the time you wrote the letter on October 18, 1934, to Mr. Reardon, that has just gone into evidence; you were drawing all your men through the National Employment Office?

(Testimony of Stephen Davidson Bechtel.)

A. I think so.

Q. That was the method that you selected, yourself, when you started the work? A. Yes.

Q. At that time, and from the beginning of the work, you had authority to work on Saturdays, Sundays and other holidays, without the payment of overtime, upon a ruling that was obtained by the District from the PWA and the state?

A. Yes.

Q. The District helped to get that provision, or obtained that [1033] provision, before any work was started?

A. I am not clear on that point.

Q. Well, isn't it your recollection that it was announced—— A. It was a fact.

Q. Yes. When you wrote the letter of October 18, 1934, you were aware of the fact, as so stated in your letter, that in the main the tunnels would not be constructed through hard rock but through comparatively soft earth and rock for a considerable distance; you knew that when you letter that letter, didn't you? A. No.

Q. Didn't you so state in your letter?

A. I don't believe so.

Mr. Tinning: May I have Defendant's Exhibit "T," please?

The Witness: May I see it?

Mr. Tinning: Q. Yes; perhaps that would be better. Now, it is true, when you read the letter,—I think perhaps you did not understand my ques-

(Testimony of Stephen Davidson Bechtel.)

tion, Mr. Bechtel; you did not have that long letter in front of you —it is true that you stated, in that letter to Mr. Reardon:

“While a project of this size does not permit an accurate analysis or forecast as to the type and formation of the ground through which the tunnels are to be constructed, it has now become apparent, and our engineers are of the opinion, that in the main the tunnels will not be constructed through hard rock but rather through comparatively soft earth and rock for a considerable distance”?

You so stated in the letter to Mr. Reardon, and you knew that to be a fact, at that time, did you not? A. No.

Q. Well, you wrote the letter, didn't you?

A. Yes.

Q. You don't mean to say you stated something in a letter to Mr. Reardon which you did not know to be a fact?

A. I don't think it says that. Possibly, in connection with the letter, there is a little background to it and the events which followed, which are part of the [1034] purpose and part of the matters touched upon here.

Q. Well, Mr. Bechtel, I am drawing your attention to a specific instance, and I am asking you now if, at the time you wrote that letter to Mr. Reardon on October 18, 1934, it is not a fact that you made the statement which appears in the paragraph which commences at the bottom of the page of the

(Testimony of Stephen Davidson Bechtel.)

copy that you hold,—page one,—and goes on to page two, in that same paragraph.

A. Well, Mr. Tinning—

Q. Will you answer me “Yes” or “No,” whether the statements you made—the statement that appears there—

A. Well, it is apparent that I made the statement; it is in the letter.

Q. Was the statement true or not true?

A. I guess I am confused as to just what you mean, Mr. Tinning.

Mr. Tinning: Will you read the question, please?
(Record read)

The Witness: A. It was.

Mr. Tinning: Q. Will you answer it “Yes” or “No,” Mr. Bechtel, and then explain?

A. You mean is it true what was written?

Q. Is the statement, in the paragraph referred to, true or not true?

A. The statement in the letter, as it appeared at that time, and based upon the background of this letter, is true.

Q. So, you knew, at that time, on October 18, 1934, that in the main the tunnels would not be constructed through hard rock but would be constructed through comparatively soft earth and rock for a considerable distance?

A. I don't think that that is what is intended by the letter.

(Testimony of Stephen Davidson Bechtel.)

Q. Well, did you know it or did you not know it? A. I did not know it.

Q. You did not know it? Then, although you wrote the letter of October 18th to Mr. Reardon, you did not know the conditions which you stated there were true?

A. This letter grew out of discussions—
[1035]

Q. Will you answer "Yes" or "No," Mr. Bechtel, and then explain?

A. Will you repeat the question, please?

Mr. Tinning: Will you read the question, please?
(Question read)

The Witness: A. It doesn't say that they are true, Mr. Tinning.

Mr. Tinning: Q. I am asking you whether you made the statements that were made in that letter.

A. Yes, I did.

Q. Did you or did you not know them to be true at the time you made them?

A. I thought what I was endeavoring to say here was correct.

Q. And that was your understanding at the time you wrote the letter? A. Yes.

Q. Thank you. When you wrote the letter of October 18th to Mr. Reardon, you knew that a project of the size of the Broadway Low Level Tunnels did not permit of an accurate analysis or forecast as to the type and formation of the ground through which the tunnels were to be constructed?

A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. That was also in your mind at that time?

A. Yes; an exact analysis cannot be made.

Q. An accurate analysis cannot be made?

A. I say an exact analysis and accurate.

Q. At the time you wrote the letter, you also knew that, due to the size of the tunnels and the ground to be encountered, heavy timbering would be required? A. No.

Q. Didn't you so state in the letter?

A. Let me see the letter.

Q. Next to the last paragraph on page two of the copy you hold. Will you please look at the last sentence? You wrote that last sentence, did you not? A. Yes; that is right.

Q. Put it in the letter? A. Yes.

Q. It reads: [1036]

"This is particularly true in soft ground tunnels where heavy timbering is required, for in such situations the use of a minimum number of shifts and men cannot help but diminish the possibility of a catastrophe to the tunnels and the workmen."

When you wrote that sentence, you knew that heavy timbering would be required in this tunnel, did you not?

A. That some would be required and was being used.

Q. That some heavy timbering would be required? A. Was being used.

(Testimony of Stephen Davidson Bechtel.)

Q. On October 18th, you were just going underground, weren't you? A. That is correct.

Q. That was the heavy timbering that you referred to at that time?

A. Yes; but, Mr. Tinning, when this letter was written, we had hoped that the tunnel ground would be improved and we would find the better tunnel ground which we had understood we were to find, and that we had planned on; and that same opinion continued for a long time thereafter; and this letter was written for the purpose of procuring permission to have our labor situation on what was comparable with other jobs being constructed in this general territory,—Southern California, Sierra Nevada, and in Northern California; and it was written for that purpose and was written after discussions with Mr. Reardon, after discussions, as I understand it, with the Highway Department, with Mr. Wallace Boggs; and this letter incorporated the thoughts and suggestions of a number of men as to the reasons why this should be granted, incorporating, as I say, the thoughts of a number of these men,—the suggestions which they had made,—and with the purpose in mind, and the only purpose in mind, of this letter, was to procure the acception or the approval of the Industrial Accident Commission of the State of California, the Joint Highway District and the other bodies that were involved,—permission to employ the men longer

(Testimony of Stephen Davidson Bechtel.)

periods of time; that was the reason stated in the letter, and for that purpose alone. [1037]

Q. Mr. Bechtel, is there any statement in this letter which is untrue?

A. Not to my knowledge.

Q. Was there any statement made in the letter which you knew was untrue at the time that you wrote it?

A. No. I think that would be obvious; I would not sign it, if I did not think it was correct, from the information I had at the time—the thought I had at the time.

Q. When you wrote the letter, there was no statement made in it which you did not believe to be true? A. That is correct.

Mr. Tinning; We will offer in evidence, if the Court please, a letter dated November 27, 1934, addressed to "Board of Directors, Joint Highway District No. 13 of the State of California," by "Six Companies of California," signed by "S. D. Bechtel, President," and ask it be marked in proper order.

(The letter was marked "Defendant's Exhibit U.")

Mr. Tinning: Gentlemen, this letter is very much the same as the one of October 18th, and I would like to read portions of it into the record which we consider are admissions and not read the rest of the letter, because it is long. If you desire the letter read—

Mr. Smith: I don't think that is a fair way to read a document or anything that is contained in the document——

Mr. Tinning. Very well; we will read it, Mr. Smith: [1038]

DEFENDANT'S EXHIBIT U.

Builders of Low Level Broadway Tunnel
Six Companies of California
155 Sansome Street
San Francisco, Calif.

November 27th, 1934.

Board of Directors,
Joint Highway District No. 13
of the State of California,
1448 Webster Street, Oakland, California.

Gentlemen:

As you are aware, the work of constructing the Broadway Low Level Tunnel has been closed down by us. We closed this work down for several reasons, the principal one, however, being our inability to procure competent labor for the construction of the tunnels under the existing restrictions in our contract and the regulations surrounding the employment of labor.

Our inability to secure competent labor for the tunnel work arises out of the following conditions:

(Testimony of Stephen Davidson Bechtel.)

The location in which this work is being done, while comparatively close to populous communities, is isolated from any adequate supply of labor of the type required for the construction of tunnels, particularly tunnels through soft ground and of the size being constructed under this contract. It is essential that the timbering and blasting operations as well as the other work in such tunnels be done by men experienced in this kind of work. This kind of work requires experienced miners. The laborers available in the District are not miners. They are mostly farmers, small home owners, and other kinds of ordinary laborers.

One of the principal reasons for this situation arises from the fact that extensive tunnel work is being carried on in Southern California at the present time under regulations permitting the men to work sixty per cent more hours and earn fifty per cent more money at a less rate per hour of pay than on the Broadway Tunnel Work. It is also a fact that a large amount of the Southern California tunnel work is being carried on near populous communities and that nevertheless these rigid restrictions have been modified so far as that work is concerned. Men experienced in tunnel work will not accept employment with us when, by going to Southern California, they can earn substantially more money. Furthermore, the laborer

(Testimony of Stephen Davidson Bechtel.)

who works in tunnels ordinarily moves from one job to another and is not permanently located in any community.

We submit that it is inequitable and unfair to permit other work of a similar nature to be carried on under more favorable conditions in Southern California when such other work is in direct competition with us for the available supply of labor.

The construction of this tunnel, because of its size and the nature of the ground, is a dangerous operation. It is impossible to give minute supervision to the details of the work which each man is doing and, in the interests of the protection of human life, it is essential that competent men be placed on the work. Improper timbering, blasting, and other operations required will, unless the work is properly done, inevitably endanger the lives of all of the men working in the tunnels. In view of the fact that the present regulations applicable to this job will necessarily, if not modified, require us to construct the tunnel with incompetent employees, we hereby protest against reopening the work until the present restrictions are modified so that the hazard to the men can be eliminated.

We believe that the only other tunnel now being constructed which is on a thirty hour a week basis is the tunnel through Yerba Buena

(Testimony of Stephen Davidson Bechtel.)

Island. The work on this tunnel is not comparable with the work on the Broadway Tunnel. The Yerba Buena tunnel is a short tunnel through hard rock and does not involve the hazards which will necessarily be encountered in constructing the Broadway Tunnel. Furthermore, the time schedule is such that the operations on the Yerba Buena tunnel are not required to be carried on at the same rate of speed as on the Broadway Tunnel. Also, the contractor on the Yerba Buena tunnel is not working under the same regulations and has complete freedom in the selection of his men.

We are satisfied that if the present regulations were modified to permit a working week of forty-eight hours on the tunnel operations the foregoing unsatisfactory and dangerous conditions could be eliminated. This work would then be placed on a basis where we could offer the men an opportunity to make comparatively the same wages that they do on other work of a similar nature in Southern California, and we feel that this would enable us to secure sufficient competent men to do the work promptly and efficiently and without any unnecessary hazard.

May we, therefore, ask that you take the appropriate steps to secure a modification of the present regulations so as to permit the tunnel operations to be carried on on the basis of a

(Testimony of Stephen Davidson Bechtel.)

forty-eight hour week before work on this project is resumed.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA,

By (Signed) S. D. BECHTEL

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. U. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: If the Court please, we offer in evidence a letter dated December 1, 1934, addressed to "Board of Directors, Joint Highway District No. 13," by "Six Companies of California," signed by "S. D. Bechtel, President"; and ask that the same be marked as a defendant's exhibit.

(The letter was marked "Defendant's Exhibit V.")

Mr. Tinning: (Reading): [1041]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT V.

**Builders of Low Level Broadway Tunnel
SIX COMPANIES OF CALIFORNIA**

**Field Office Post Office Box 120
Berkeley, California**

December 1, 1934

**Board of Directors
Joint Highway District No. 13
of the State of California,
1448 Webster St.,
Oakland, California.**

Gentlemen: .

As you are aware, the work of constructing the Broadway Low Level Tunnel has been closed down by us. We closed this work down for several reasons, the principal one, however, being our inability to procure competent labor for the construction of the tunnels under the existing restrictions in our contract and the regulations surrounding the employment of labor.

In our preliminary operations of going underground, we have obtained from the N. R. S. Bureau 230 men for tunnel work. Of this number, we have made the following disposition:

(Testimony of Stephen Davidson Bechtel.)

Quit, have better jobs.....	47
Discharged, totally unfit.....	30
Reduced from miners to muckers, because of qualifications	24
Discharged, non-citizen	5
Discharged, medical rejection.....	26
Deceased	1
Total number remaining on call.....	97

 230

Of the 97 indicated above, who are technically on call, we estimate there are approximately 30 who by their work have indicated that they are fair tunnel men. As only 200 tunnel men, in addition to the above, are registered at the N. R. S., we do not believe that we would be able to secure any greater percentage of satisfactory tunnel men from these remaining men than that which we have experienced above.

Our inability to secure competent labor for the tunnel work arises out of the following conditions:

The location in which this work is being done, while comparatively close to populous communities, is isolated from any adequate supply of labor of the type required for the construction of tunnels, particularly tunnels through soft ground and of the size being constructed under this contract. It is essential that the timbering and blasting operations as well

(Testimony of Stephen Davidson Bechtel.)

as the other work in such tunnels be done by men experienced in this kind of work. This kind of work requires experienced tunnel men. The laborers available in the District are not tunnel men. They are mostly farmers, small home owners, and other kinds of ordinary laborers.

One of the principal reasons for this situation arises from the fact that ninety (90) miles of tunnel work is being carried on in Southern California at the present time under regulations permitting the men to work sixty percent more hours and earn fifty percent more money at a less rate per hour of pay than on the Broadway Tunnel work. It is also a fact that a large amount of the Southern California tunnel work is being carried on near populous communities and that nevertheless these rigid restrictions have been modified so far as that work is concerned. Men experienced in tunnel work will not accept employment with us when, by going to Southern California, they can earn substantially more money. Furthermore, the laborer who works in tunnels ordinarily moves from one job to another and is not permanently located in any community. Also many miners are going into mining work due to the large development now underway in that field.

We submit that it is inequitable and unfair to permit other work of a similar nature to be carried on under more favorable conditions in

(Testimony of Stephen Davidson Bechtel.)

Southern California when such other work is in direct competition with us for the available supply of labor.

The construction of this tunnel, because of its size and the nature of the ground, is a dangerous operation. It is impossible to give minute supervision to the details of the work which each man is doing, and, in the interests of the protection of human life, it is essential that competent men be placed on the work. Improper timbering, blasting, and other operations required will, unless the work is properly done, inevitably endanger the lives of all of the men working in the tunnels. In view of the fact that the present regulations applicable to this job will necessarily, if not modified, require us to construct the tunnel with incompetent employees, we hereby protest against reopening the work until the present restrictions are modified so that the hazard to the men can be eliminated.

We believe that the only other tunnel now being constructed which is on a thirty hour a week basis is the tunnel through Yerba Buena Island. The work on this tunnel is not comparable with the work on the Broadway Tunnel. The Yerba Buena tunnel is a short tunnel through hard rock and does not involve the hazards which will necessarily be encountered in constructing the Broadway Tunnel. Furthermore, the time schedule is such that the

(Testimony of Stephen Davidson Bechtel.)

operations on the Yerba Buena tunnel are not required to be carried on at the same rate of speed as on the Broadway Tunnel. Also, the contractor on the Yerba Buena tunnel is not working under the same regulations and has complete freedom in the selection of his men.

We are satisfied that if the present regulations were modified to permit a working week of forty-eight hours on the tunnel operations, the foregoing unsatisfactory and dangerous conditions could be eliminated. This work would then be placed on a basis where we could offer the men an opportunity to make comparatively the same wages that they do on other work of a similar nature in Southern California, and we feel that this would enable us to secure sufficient competent men to do the work promptly and efficiently and without any unnecessary hazard.

A crew will be composed of the following men, with the respective rates shown:

Ten miners,	at \$0.75 per hour
Two nippers,	at \$0.60 per hour
Seven chuck tenders,	at \$0.60 per hour
Fifteen muckers,	at \$.60 per hour
One shovel operator,	at \$1.25 per hour
One dinky operator,	at .75 per hour
One powder man,	at .75 per hour
Two pitmen,	at .60 per hour
One brakeman,	at .65 per hour
One tugger man,	at 1.25 per hour

(Testimony of Stephen Davidson Bechtel.)

This makes a total crew of forty-one (41) men. Practically all these men are trained in the various operations undertaken in a heading and are required to know safe practices in the different kinds of work performed underground, namely, drilling, blasting, timbering and mucking.

May we, therefore, ask that you take the appropriate steps to secure a modification of the present regulations so as to permit the tunnel operations to be carried on on the basis of a forty-eight hour week before work on this project is resumed? On the thirty hour week this would amount to 229 men affected; on a forty-eight hour week, 144 men would be affected.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA,

By (Signed) S. D. BECHTEL

President (T. M. P.)

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. V. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

[Endorsed]: Received Dec. 1, 1934. Joint Highway Dist. No. 13.

Mr. Tinning: Q. When you wrote this letter, you made a statement that the work was closed

(Testimony of Stephen Davidson Bechtel.)

down on the Broadway Tunnel by you. When you bid on this job, you knew the specifications required you to leave the concrete forms on the lining for a period of 21 days, which was required by the District Engineer?

Mr. Marrin: This letter appears to have been signed by someone else, on Mr. Bechtel's behalf,—“T. M. P.”—apparently, Mr. Tom Price. I wonder if you would mind showing him the original, to see whether he actually signed it or not?

The Witness: Yes, that is signed by Mr. Tom Price, upon my authority.

Mr. Tinning: Q. Did you dictate the letter, or did Mr. Price?

A. I believe that Mr. Price did.

Q. However, the statement that appears at the first paragraph of this letter of December 1st is substantially the same as the statement that appears in the first paragraph of the letter which you did sign, yourself, which you wrote on November 27, 1934?

The Court: I think the witness indicated that he authorized the letter in question.

Mr. Tinning: Yes. [1045]

Q. Well, you knew, at the time you signed it, that the specifications in this matter gave the District Engineer the right to retain the concrete forms on the concrete lining 21 days, up to that time, did you not? A. Yes.

Q. It is a fact, is it not, the rings that were placed at the west portal of these tunnels were required by the District Engineer to remain with the

(Testimony of Stephen Davidson Bechtel.)

forms in place for 21 days after the concrete was poured?

A. Yes, I think so.

Q. So that the work was shut down at the west portal of the tunnels primarily and apparently because you could not work driving further in while the forms were studded in the core in each of those two portions of the tunnel; that is true, isn't it?

A. I presume so.

Q. So that, from about the 6th or 7th of November,—or the 14th of November, in the north bore, and the 6th or 7th, on the south bore, until the 5th or 6th of December, the work was shut down because you could not drive through the point where you had those forms supported against the stulls waiting for the concrete to season?

A. We could have, with the approval of the Engineer, apparently, Mr. Tinning.

Q. But you did not get that approval, did you?

A. I don't think so.

A. And the forms remained the 21 days?

A. As I recollect it.

Q. You say the work was shut down and the driving of those tunnels was shut down to permit the concrete to season in accordance with the provisions of the specifications and the conditions which you knew when you bid?

A. That is right.

Q. That is right, isn't it?

A. I would think so.

The Court: We will take a recess until two o'clock this afternoon.

(Thereupon, an adjournment was taken until two o'clock p. m., this date.) [1046]

(Testimony of Stephen Davidson Bechtel.)

Afternoon Session,

Tuesday, April 26, 1938;

2 O'Clock P. M.

STEPHEN DAVIDSON BECHTEL,

Cross Examination (Continued)

Mr. Tinning: Q. Mr. Bechtel, so that it will be easier for you to answer the questions, I will hand you the letter that has been previously admitted in evidence as Defendant's Exhibit "V."

Mr. Bechtel, when you wrote that letter which is dated December 1, 1934, what did you have in mind when you wrote the sentence which appears as the first sentence of the fourth paragraph on the second page of that letter? So there will be no confusion, will you please turn to it? What did you mean when you wrote that sentence:

"The construction of this tunnel, because of its size and the nature of the ground, is a dangerous operation——"

What did you mean by "the nature of the ground"?

A. Mr. Tinning, this was written over my signature, with my approval, but by Mr. Price, I believe.

Q. What did you mean when you approved it?

A. Well, I approved, to Mr. Price, the submission of this letter which I believe that he called me on the phone and asked me my approval for; and after he had discussed this matter with the Indus-

(Testimony of Stephen Davidson Bechtel.)

trial Accident Commission, I believe with Mr. Boggs, the PWA people and the National Reemployment people; and it, in substance, was the same as the previous discussions we had had, and was furthering the end of procuring or asking for the approval to work a 48 hour week.

Q. I understood that was the purpose of the letter; but what, in your mind, was the meaning of the words that you were using in seeking to get the permission, "and the nature of the ground"?

A. Well, the nature of this ground—that was probably referring [1047] to the fact that, at that time, we had constructed something like 90 feet in the north tunnel and 110 feet in the south tunnel. We knew that that ground was difficult,—more difficult than we had anticipated; we knew it was very difficult ground, and we hoped we would have better ground, but we were not sure but what we would have continued bad ground; and, in referring to the nature of the ground here, I assume that that was what was involved.

Q. You did not say anything in this letter that you met any unanticipated conditions; you did not say anything about unanticipated conditions in this letter, did you? A. Apparently not.

Q. And you were referring not to the ground through which you had passed but the ground into which you intended to drive?

A. It was based upon the ground through which we had gone to that time, and it was anticipating a

(Testimony of Stephen Davidson Bechtel.)

ground condition that might or might not get better; we hoped it would get better, but we did not know whether we would get better ground, and we were preparing for the contingency where the bad ground would continue for some distance.

Q. And that was what you meant when you stated to Mr. Reardon, in your letter of October 18, 1934, that it was impossible to predict the ground you might encounter in a project of this size?

A. That is right, yes.

Q. All right. Will you proceed to the last sentence of that paragraph:

“In view of the fact that the present regulations applicable to this job will necessarily, if not modified, require us to construct the tunnel with incompetent employees, we hereby protest against reopening the work until the present restrictions are modified so that the hazard to the men can be eliminated.”

Why were you protesting to the District when you were dealing with the Industrial Accident Commission?

A. Well, this matter had been discussed with Mr. Boggs, because it was with the District.[1048] that we had our contract. Our contract conditions were that we could not work over 30 hours per week at that time, and we were applying to Mr. Boggs, or the District; we were also applying to the Industrial Accident Commission, Mr. Reardon, because

(Testimony of Stephen Davidson Bechtel.)

we understood that that was the procedure that we should follow. We were so instructed to that effect by Mr. Boggs: that we should do it.

Q. As a matter of fact, your contract provisions and the provisions of the laws of the State of California and the United States PWA regulations would govern the hours of labor of men working on the work; that is true, isn't it. A. Yes.

Q. You have already stated you knew that when you estimated? A. Yes.

Q. When you bid. And it was necessary for you to apply to the Department of Industrial Relations under the then law, the provisions of Section 653C of the Penal Code for special permission to work men more than 30 hours per week on this type of work?

A. Substantially, yes; but I don't think—I did not intend to say at that time there was no state law which required you could not work over 30 hours a week; that was a contract provision. We were advised by you, or by Mr. Boggs, that we had to first get the approval of the Industrial Accident Commission, also the District, also the PWA, also the NRS; and the burden of the proof on the entire matter was put up to us, and we made the rounds not once but several times,—Mr. Price did, and myself,—on that subject.

Q. Mr. Bechtel, referring again to your letter of October 18, 1934, which you have got before you, I want to call to your attention that, at the end of the

(Testimony of Stephen Davidson Bechtel.)

first paragraph, you made your first application under the provisions of Section 653C1 of the Penal Code, which was the statute,—an emergency statute,—in effect at the time the contract was let, as up to that year; thereafter, until the [1049] Legislature met in 1935, it limited the work on all public projects to 30 hours per week unless you got a waiver from the Department of Industrial Relations. You have just told me that you thought it was a contract provision. It was a provision of law which you referred to in your letter?

A. Well, we applied to both, Mr. Tinning, endeavoring to get their approval. I understood we had to get the approval of the Industrial Accident Commission, likewise that of Joint Highway District No. 13; and we were somewhat guided by the advice and views and directions we got from Mr. Boggs and from Mr. Reardon's office, and all parties that were involved.

Q. Well, you had attorneys, didn't you?

A. Yes.

Q. And they assisted you in the preparation of this application? A. Yes.

Q. They saw your letters?

A. Undoubtedly they did.

Q. Why were you protesting to the District when it was a matter for Mr. Reardon of the Division of Industrial Relations?

A. Well, this is directed to Joint Highway District No. 13.

(Testimony of Stephen Davidson Bechtel.)

Q. Yes. I am asking why you were protesting to us about something that was in your contract.

A. To get your approval and get your support to a proposition which we thought was favorable to the work, and we were doing everything possible.

Q. And you assumed you could get our support by protesting?

A. Well, I would gather that must have been in our minds. I cannot recall the reason why we used certain words, but that was our purpose: to get your support or get your approval, or both.

Q. Following the filing of the letter with the Industrial Accident Commission, you testified, at a hearing—let me withdraw that question. Following the filing of the letter with the Department of Industrial Relations of the State of California, Mr. Bechtel, you testified, at a hearing before Mr. Reardon, the Director of the [1050] Department, on the 4th day of December, 1934—do you remember that hearing in Mr. Reardon's office?

A. I remember a hearing there; but I don't remember the date.

Q. Do you remember that Mr. Reardon, the Director of the Department, was there; Mr. Frank Burke, Secretary; there was a court reporter; Mr. Boggs and myself were there; Colonel Skaggs, Division Engineer of the State Highway Commission, was present; and L. M. Larson, T. M. Price, T. D. Ferneau,—who was a state inspector, I believe; and they were present at that time?

(Testimony of Stephen Davidson Bechtel.)

A. I don't remember each one of those being present.

Q. Do you remember, at that hearing, you appeared there for the application that was initiated by your letter of the 18th of October and had been followed by letters to the Department, dated the 27th of November and the 1st of December?

A. Yes.

Q. Which we have already introduced. I will ask you if, at that time and at that hearing and pursuant to the application which Six Companies of California was making for a change in the 30 hour work rule—if you made this statement at that hearing:

“The condition would be substantially improved over that which now exists. If we could cooperate with the National Reemployment Service in the selection of men, or picking, judging ability of the men, even then we would have difficulty in holding experienced men on this job and work them only 30 hours per week. The earnings on the job are not attractive. On account of the large tunnel work done in Southern California, Parker Dam, Boulder Dam, and the mining industry. Mining all over the western country is drawing upon experienced miners constantly. However, it would be of substantial benefit and help in solving this problem if we could find some modification or other prac-

(Testimony of Stephen Davidson Bechtel.)

licable application of employment through the National Reemployment Agency." [1051]

Do you remember that?

A. I don't remember the particular phrasing you speak of; but I remember being there, and I remember my testifying, Mr. Tinning.

Q. Do you remember giving the further statement:

"We understand that there are approximately 200 men registered as miners. Our experience, I can state from actual statistics we have kept of same, and if the ratio would continue, we would get between 25 and 30 tunnelmen out of the ones reported to be available provided the 30 hour per week would continue. I would like to comment on this thing. These tunnels are being constructed through the Coast Range Mountains. Experience over 40 years indicates that the Coast Range in every instance presents dangers and difficulties. We have records of bad tunnels. The San Pablo Tunnel was constructed for the East Bay Water Company 15 years ago and in one accident eight lives were lost. The Claremont Tunnel is within a mile or so of this tunnel. Different conditions develop on both ends of tunnels 3 miles long. There is very wet swelling ground and difficult ground. The Sacramento Northern Tunnel presented a number of difficult conditions. The Northern

(Testimony of Stephen Davidson Bechtel.)

Pacific Tunnel through Niles Canyon in the Coast Range Mountains was extremely difficult."

I think, by that, you were referring to the Western Pacific; possibly the reporter made a mistake?

A. Probably so.

Q. "It took twice as long to construct than contemplated. In the Hetch Hetchy Tunnel, as you know, there was swelling and difficult hazardous ground was experienced there. Through those same mountains we have to construct this tunnel. In the Coast Range you get a different formation—no continuity. You have to have versatile crews and high type men. We have that in the selection of the crew and the men on the job. Of six contractors who constitute the Six [1052] Companies of California we have good men. The superintendent or foreman has to have experienced tunnel crews. All the men can do any part of the work themselves. Our experience indicates that of the men we have gotten, there is not over a small percentage of them qualified to work in a tunnel of that kind if that tunnel is to be constructed without serious accidents. Relief can come in two forms: First, the lengthening of hours of permissible work for underground men from 30 hours maximum to 40 hours maximum; Second, and partial solution of this will be a modification or cooperative

(Testimony of Stephen Davidson Bechtel.)

understanding having to do with the selection or procuring of men so that experienced tunnelmen could be procured for this work. The present condition of 30 hours per week and non-selectivity of men make it extremely slow to get ahead with a tunnel of this kind. We have to have experienced men so that the work is done by them as a team and without it difficulties develop. They have developed. We hope to minimize that as time goes on and in cooperation of 40 hours per week and selectivity by the National Reemployment Service of the men we hope to protect the safety of the tunnel and the men."

Do you remember making that statement at that time, Mr. Bechtel?

A. Yes; and I believe it is a very pertinent point, Mr. Tinning, because, in there, I observed, in the Coast Range Mountains there are bad tunnel grounds, there are also good tunnel grounds. I speak there about the two ends of a tunnel,—whether 3 miles apart or 3000 feet apart; they may be different; and that was the case in many of these tunnels. In many of these tunnels referred to, there were portions of them that were very good ground; other portions were very bad ground. It doesn't take very much bad ground in a tunnel to make it a very difficult situation,—a very slow situation. When the first of these letters was written, on October 18,

(Testimony of Stephen Davidson Bechtel.)

1934, we had [1053] completed the bottom drifts of two tunnels,—both the north and south tunnels; and we knew what was encountered in those 100 feet, approximately; and we knew there what we were going to get into, or what was anticipated. We had anticipated good ground; and, up to that point, we had been wrong. We did not know how much further we were going to be wrong. We hoped for better ground; and this letter here, I think, is very pertinent. I think it explains my thought at that time. I would, today, give you the thought that different ends of the same tunnel, of tunnels through the same range—different tunnels in the same territory and the same state, vary substantially; and all a contractor can do is use the best judgment on the information furnished him to make his bid; and that is what we did in this case; we used the information that was called to our attention; we used the information given us by Dr. Louderback, the information which you called to our attention, and we made our calculations—our assumptions, from that. We found that it was different. When we got to this point here, we had gone in 100 feet and were looking to make more progress and to enter further into the spirit of finishing this job quickly and with a maximum effort and minimum cost, by asking your cooperation and the Industrial Accident Commission for a 48 hour week, then; and then, on the advice of the PWA, of the National Reemployment Service, or Mr. Boggs or a group of people—it was reduced

(Testimony of Stephen Davidson Bechtel.)

to ask for 40 hours a week, which was prevailing in the state somewhat generally at the time; and was subsequently approved.

Q. Mr. Bechtel, Mr. Boggs had nothing to do with the granting of permission for a 48 hour week or a 40 hour week, did he? It was a matter for Mr. Reardon and the PWA authorities and the District Directors?

A. Yes. However, it was not only necessary to secure these approvals referred to, but also to have the approval of the Joint Highway District No. 13 and the District [1054] Engineer,—Mr. Boggs; so it was to that end that we were working in this instance.

Q. You had his full assistance, and full assistance of the District, in getting the 40 hour week, did you not?

A. Mr. Boggs said he could not do anything more than passing it on; that he would not object to it; but, more directly, I think we did have his assistance, or we certainly did not have any objection on his part.

Q. All his assistance and the District's cooperation?

A. Yes.

Q. You stated, in your testimony to the Department of Industrial Relations, that "experience over 40 years indicates that the Coast Range in every instance presents dangers and difficulties"? You knew that when you bid, did you not?

(Testimony of Stephen Davidson Bechtel.)

A. No; I think that that is either a misstatement or a matter that was made in conversation. It is not exactly correct, Mr. Tinning. If it was said—if I said it, why, I should probably have corrected it immediately thereafter, because I don't think it is a correct statement.

Q. Let me see if I understand, Mr. Bechtel. Do I understand you to say you did not make the statement on December 4, 1934?

A. I wouldn't say that. I wouldn't say I did not make it.

Q. Mr. Bechtel, I am reading from a certified copy of the transcript of the hearing, that is certified by Gertrude Maloney, the reporter who took the testimony at that hearing, and I have been reading to you, Mr. Bechtel, the examination—the first question was on page 7 of the transcript, and I have been reading now the sentence that appears in the top of page 8. Now, as I understand you, you don't question the accuracy of the report; but you say you did not mean to say what you said there; is that it?

A. That may be it.

Q. Well, what is it?

A. Well, that the exact statement there was made in a matter of a general discussion before a Commission, at which we were having a general discussion of the entire problems [1055] involved. We were discussing tunnels generally, and, if I said that, I don't think that is what I intended to say.

Q. You don't deny you did say it?

(Testimony of Stephen Davidson Bechtel.)

A. I may have probably said it. If the recorder says I said it, I probably said it.

Q. "Experience over 40 years indicates that the Coast Range in every instance presents dangers and difficulties"?

A. If I said it, I was in error.

Q. "We have records of bad tunnels"? Did you say that?

A. If the recorder says I did, I probably did.

Q. "The San Pablo Tunnel was constructed for the East Bay Water Company 15 years ago and in one accident eight lives were lost——"

A. I understood that was correct.

Q. You knew that when you bid on this work, did you? A. I probably did.

Q. "The Claremont Tunnel is within a mile or so of this tunnel"? You knew that when you bid on this work? A. Yes.

Q. You employed Mr. Larson to make the estimate for you, and he had worked on the Claremont Tunnel? A. Correct.

Q. You knew that when you employed him?

A. Yes.

Q. That was one of the reasons that you employed him, wasn't it? A. One of them.

Q. He knew the conditions to be encountered on your estimate; that was true?

A. Well, he knew what his experience had indicated. Having known he went there and was there for a long period, and his familiarity with condi-

(Testimony of Stephen Davidson Bechtel.)

tions generally around the Bay, and this tunnel construction generally, we employed him.

Q. His experience that you employed for the purpose of preparing this estimate was a part of the experience of over 40 years that indicated that the Coast Range in every instance presents dangers and difficulties?

A. I referred to the Claremont Tunnel there, and did employ Mr. Larson. [1056]

Q. "Different conditions develop on both ends of tunnels 3 miles long"? That was with reference to the Claremont Tunnel, wasn't it?

A. I presume it was.

Q. You knew, when you were giving this testimony, that there had been a great deal of difficulty in driving the Claremont Tunnel?

A. I did not so assume.

Q. You did not so assume?

A. No. I say I did not consider the ground had been difficult as a tunnel job. I had considered it was a good tunnel.

Q. You considered it a good tunnel?

A. Generally speaking, yes.

Q. Did you consider that, when you bid on the Broadway Tunnel?

A. Probably it had some effect.

Q. You thought the Claremont Tunnel was a good tunnel when you prepared your bid on the Broadway Tunnel? A. Yes, generally.

(Testimony of Stephen Davidson Bechtel.)

Q. At that time, in preparing a bid on a project of some three and a half million dollars, you had in mind that the Claremont Tunnel was a good tunnel?

A. That was one of the considerations.

Q. You so assumed?

A. And I might comment on that, Mr. Tinning: that we had bid on that job; W. A. Bechtel had bid on that job; and bid within three or four or five per cent of the bid of Greer and Meade, who got the job; and, also, I had visited the tunnel; I had gone down, particularly in the east end of the tunnel, and I had seen the ground, myself, and I considered that portion of it very good ground condition.

Q. How far did you go into the east portal of the Claremont Tunnel?

A. Up to the face; as I say, at that time I cannot recall, Mr. Tinning, how far that was. It probably was several thousand feet.

Q. Several thousand feet. What formation was it in when you visited the face?

A. Well, I am not a geologist, and I wouldn't say the exact formation. I would consider it was in the Orindan.

Q. That was from the east portal?

A. Yes. [1057]

Q. That was on the east portal? A. Yes.

Q. When you were in the Claremont tunnel did you observe the section in this tunnel, where the excavation, forward of the excavation, was approximately 12 feet broad and 12 feet high, did you see

(Testimony of Stephen Davidson Bechtel.)

the sets in the Orian formation where the timbers were crushed and the timber crews were constantly at work setting new timbers before the concrete lining was installed? A. No.

Q. Did you consider that ground self-supporting?

A. I was told at that time by the foreman on the job that the timbers had largely been placed as a matter of protection to the men.

Q. You were not able to judge from your own observation? A. No.

Q. The timber was left in, was it not?

A. I don't know. From hearsay I understand that it was.

Q. Didn't you know whether the timber was left in or not when you prepared your bid for the Broadway Tunnel? A. No.

Q. You did not bother about that?

A. I did not specially bother, some things you know and some things you don't know, I didn't know that.

Q. When you were applying for this 48-hour week in December of 1934, approximately six or seven months after you bid on the job, you referred to the Claremont Tunnel as one in which difficulties had occurred.

A. I understood they had difficulties.

Q. You had that tunnel in mind in making this application, and then you stated that you did not consider it a difficult tunnel when you were preparing your bid for this Broadway Tunnel.

(Testimony of Stephen Davidson Bechtel.)

A. Generally speaking that is correct.

Q. How do you reconcile the fact that you stated that it was a difficult tunnel when you were testifying before Mr. Reardon on December 4, 1934 with your statement now that when you were preparing the bid on the Broadway Tunnel that you did not consider [1058] the Claremont Tunnel a difficult tunnel?

A. Generally speaking, I considered it a good tunnel; there were spots in it which I understood from what others told me were difficult. We were in a bad portion of the Broadway Tunnel, we had 100 feet of it that had been exposed that was different from what we had anticipated, difficult and dangerous ground, and it was that our experience was based on; it was based on that experience that we prepared these letters. I had been out there once a week, and sometimes oftener than that, and observed the conditions which existed on the job at that time.

Q. Didn't you have a warning from the partial geological report that was in the possession of Six Companies, Mr. Calhoun, that shows hill creep and stream wash at the west portal of the tunnel?

A. Mr. Larson told me of that.

Q. So you had warning that you might expect difficulty getting underground?

A. At the portal, that is correct, but it was a question of degree, Mr. Tinning.

Q. Yes, it is all a question of degree?

A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. The relative size of the tunnel was a very important matter with respect to strains and stresses that must be maintained by the timbers as you drive further, was it not? A. Yes.

Q. You so state in your letter, that in large tunnels difficulties increased very rapidly compared to the difficulty in small tunnels. A. That is true.

Q. You understood that? A. Yes.

Q. You knew that when you bid on the job?

A. Yes.

Q. Now, with respect to the Claremont Tunnel, which you say at the time you bid you considered to be a good tunnel, when on the 4th of December you testified as I read to you, I will call your attention to the next portion of your statement—you had pre- [1059] viously stated the Claremont tunnel, within a mile or so different conditions developed on both ends of the tunnel three miles long, that we have discussed, and I will now call your attention, after having said you considered this was good ground, there is very wet swelling ground and difficult ground, when you were testifying before Mr. Rear-don on that date in respect to the Claremont Tunnel you thought that was bad ground, didn't you?

A. Which do you refer to?

Q. In the Claremont Tunnel.

A. That portions of it were, the portions that Mr. Larson had told me were, and having discussed that with Mr. Larson, and as we were involved in this labor situation at that time, obviously I drew

(Testimony of Stephen Davidson Bechtel.)

upon such information, we had expected some portion was good and we expected some bad ground, and difficult ground in the Broadway Tunnel, just as we had some in the Claremont Tunnel, and when I say the Claremont Tunnel is good, I do not say it is 100 per cent. good. When I say it is bad or difficult, or dangerous in either the Claremont or Broadway Tunnel, I do not mean it is 100 per cent. bad.

Q. So that when you were talking to Mr. Reardon and you said that you had records of bad tunnels, you were referring to tunnels in which some bad ground occurred and in other portions of which there was good ground? A. Yes.

Q. Now, then, when you were referring to the Sacramento Northern Tunnel, where you said the Sacramento Northern Tunnel presented a number of difficult conditions, you had in mind the history of that tunnel, did you not?

A. Well, as I understood it, Mr. Tinning.

Q. You were an expert in this work?

A. No, that is not correct.

Q. You were contracting to do a job in which you guaranteed and represented yourself to be an expert in this contract?

A. Being a contractor does not necessarily mean he is an expert [1060] in geology, or every part of the work he does, but generally speaking I was familiar with that tunnel.

Q. You were generally familiar with the type of work that you were undertaking for the Six Companies in driving this tunnel?

(Testimony of Stephen Davidson Bechtel.)

A. Generally speaking.

Q. And as such you had a general knowledge of the tunnels around in the bay region?

A. Some of them.

Q. And you knew from your general information that the Sacramento Northern Tunnel had presented a number of difficult conditions?

A. I understood that certain parts of the tunnel had been difficult.

Q. There had been slides in them?

A. I didn't know that.

Q. And caving? A. I didn't know that.

Q. Did you know that there had been one slide that made a great big chamber in the roof that required some 40 or 50 cords of wood to fill up before the tunnel could be concreted?

A. I don't recall that; I do remember that there was quite a bit of timbering, that the tunnel was timbered and not concreted, and had been standing for a good many years.

Q. Would you say when you bid on this Broadway Tunnel that the Sacramento Northern Tunnel was not concreted in part? A. How is that?

Q. Would you say that the Sacramento Northern Tunnel, which is about a mile away from the Broadway Tunnel, or two miles, which is shown on the exhibit, here, would you say that that tunnel was not concreted in part, in any section at the time that you prepared your bid and submitted it to this district? A. That is my understanding.

(Testimony of Stephen Davidson Bechtel.)

Q. That was your understanding? A. Yes.

Q. So that you would be in error if the fact appeared that a large part of that tunnel had been concreted long prior to May 22, 1934, when you prepared your bid?

A. No, because you say a large [1061] part of it; I did not say none of it was concreted. I believe some was and some was not, and some was timbered.

Q. The good ground was concreted and the bad ground was timbered? A. I don't know.

Q. You never inspected it? A. No.

Q. The next one, the Northern Pacific Tunnel through Niles Canon in the Coast Range Mountains was extremely difficult. The Northern Pacific Tunnel I believe we have agreed is the Western Pacific Tunnel, wasn't that built by your father?

A. No, it was not.

Q. Was your father's company connected with it?

A. I believe it was constructed by the Utah Construction Company, but I am not sure of that.

Q. You knew, however, that there had been great difficulties in constructing that tunnel?

A. I knew there had been some difficulties.

Q. You knew it took twice as long to construct?

A. I am not clear on that, whether it took twice as long to construct that tunnel or not, but what you have read was my information or understanding at that time.

Q. You also referred to the Hetch Hetchy Tunnel and you said in the Hetch Hetchy Tunnel there

(Testimony of Stephen Davidson Bechtel.)

was swelling and difficult hazardous ground experienced there. Now, the Hetch Hetchy Tunnels through the Coast Range were being constructed just previous to your putting in your bid, were they not?

A. I believe they were still under construction.

Q. Some of the equipment that was used in the driving of the Hetch Hetchy Tunnel was moved onto this job, was it not?

A. You are right on that.

Q. The compressors and some of this other equipment? A. Yes.

Q. You knew the conditions that had been encountered there, did you not, the heavy swelling ground?

A. There were parts where [1062] there was heavy swelling ground; there were some parts that were difficult and other parts were very good.

Q. You knew that?

A. I knew it, that parts of it had been difficult, and I also had heard that parts were very good.

Q. That is what you meant when you went on with the next statement:

“Through those same mountains we have to construct this tunnel. In the Coast Range you get a different formation—no continuity.”

That is what you mean, you were going to meet the same kind of conditions in your work here as they met in the Hetch Hetchy, some was heavy work and

(Testimony of Stephen Davidson Bechtel.)

some sections where the ground would support itself without great difficulty?

A. Yes, there is a possibility of that, some would be very difficult and some would be very good. However, we had contemplated and had figured on, and had bet our money on a condition which was apparent to us at the time from the geological report and from estimates which Mr. Larson made. That was the basis of that bid. Mr. Tinning, there is one thing one must keep in mind in estimating a tunnel, you have to take into consideration the particular job, you cannot make generalities, of course, on what happens some place else, or what happened one mile or five miles away from this particular job, and it is the assumptions and basis for assumptions and specifications and the conditions throughout that particular job that you have to analyze. You have to make your bases or assumptions from it, you have to make your cost of construction from that, and you make your bid from that, and that is what we did in this instance, and as we proceeded here the conditions were different, we recognized they were different, and when we came to this point there were difficulties that we tried to overcome, so that to make more progress, so that we should get the approval of the various changes I have referred to, to change [1063] from the 30-hour week to 40-hour week, so that we would get and hold good men and attract men from other parts of the State.

(Testimony of Stephen Davidson Bechtel.)

Q. Is this true, Mr. Bechtel, that in none of these documents which you have seen, which have been introduced in evidence, nor in the testimony before Mr. Reardon, that you never said at one single place that you had met any unanticipated conditions. That is true, is it not?

A. I might comment on that, that we are not discussing that point there, we thought it was of no moment. The purpose of this communication was to get a week of 40 hours, a week of 48 hours instead of 30, for the employment of men. That was the purpose of this discussion, that was the purpose of this meeting, of these minutes you have got there, and the letters.

Q. So that it is a fact, is it not, that in none of these communications to Mr. Reardon, or to the District, did you state that you had met any unanticipated conditions, although you had been working on the tunnel approximately, on the project about six months?

A. I do not believe that we did.

Mr. Tinning: The defendant offers in evidence a letter dated December 5, 1934, addressed to Hon. T. A. Reardon, Director of the Department of Industrial Relations, State Building, San Francisco, California, and signed by S. D. Bechtel, President. This is an amended or supplemental application or recital in connection with the hearing at which Mr. Bechtel testified on the preceding day. We offer this as Defendant's Exhibit W.

(Testimony of Stephen Davidson Bechtel.)

(The letter was marked "Defendant's Exhibit W.")

DEFENDANT'S EXHIBIT W

December 5, 1934

Honorable T. A. Reardon,
Director of the Department of
Industrial Relations,
State Building, San Francisco, California.

Dear Sir:

We have heretofore entered into a contract with Joint Highway District No. 13 of the State of California for the construction of the Broadway Low Level Tunnel Project. We respectfully request that you examine said project and determine, as to all underground operations in connection with the construction of the tunnels constituting a part of said project, that the application of the provisions of Section 653c-1 of the Penal Code of the State of California is impractical.

We request that, as to this portion of the project, we be permitted to operate on a 48-hour week in lieu of a 30-hour week. In making this request we desire to point out that the only matter involved here is the question of the hours of labor and that the wage scale provided for in our contract with the District will be fully complied with.

In carrying out our contract with the District it will be necessary for us to construct two twin

(Testimony of Stephen Davidson Bechtel.)

bores, each approximately 3,000 feet in length and 36 feet in diameter. These tunnels involve construction work of a hazardous and dangerous character. The safety of the men and the work largely depends upon the experience and ability of the tunnel men employed on the job. All concerned should take every possible step to minimize the dangers and assure the safety of the men.

The tunnel work has been closed down, the principal reason being our inability under existing restrictions, including the provisions of Section 653c-1 of the Penal Code, to procure an adequate supply of competent and experienced labor with which to construct the tunnels with any reasonable degree of safety to life and property.

Our inability to secure competent and experienced labor for the tunnel work arises out of the following conditions:

The tunnels are to be constructed through a part of the Coast Range mountains, which have a long history of difficult and dangerous tunnel construction, due in part to the constantly varying geological formations which are encountered in tunnel work in this range. Our own experience to date on the present project, indicating the presence of soft ground rather than hard rock, combined with the knowledge that the tunnels will cross the line of the Wildcat Fault,

(Testimony of Stephen Davidson Bechtel.)

make it imperative that we anticipate similar difficulty on this job and organize and prepare plans and methods, including adequate supervision and an experienced and versatile working organization, which will enable us to cope with the conditions which we will probably encounter. The size of the tunnels which we are constructing, involving hazards many times greater than those of smaller tunnels constructed nearby, make their construction a dangerous operation and make such precautions absolutely essential.

We have taken all possible steps to be in a position to meet the conditions which we foresee, but without an adequate supply of experienced tunnel men the progress and safety of the project and the safety of human life will be seriously endangered. Improper timbering or blasting, improper performance of the other required operations, or the inability adequately to meet an emergency will inevitably endanger the lives of all the men working in the tunnels and may result in a serious catastrophe. It is impossible, of course, to give minute supervision to the details of the work each man is doing and it is therefore essential that only experienced and competent men be placed on the work. We must have men experienced in soft and wet tunnel construction, as well as men experienced in the construction of large diameter tunnels.

The number of available competent men has been reduced because of the large amount of

(Testimony of Stephen Davidson Bechtel.)

tunnel and mining work being performed in the West at the present time. Unless the determination herein requested is made by you, it will be necessary for us to continue our tunnel operations on a 30-hour week while men employed on the other work are permitted to work much longer hours, running as high as 60% in excess of our maximum, and resulting in increased weekly earnings amounting in some cases to 50% more than the earnings of our men, although the hourly rate of pay is the same or less than ours.

Our experience in the last three months has indicated that we cannot obtain for or hold on this job a sufficient number of qualified and experienced tunnel men unless the existing restriction on the hours of work per week is relaxed so that we may employ men on a basis comparable to that prevailing elsewhere. During the past several months the National Reemployment Service, the agency through which under the provisions of our contract we are obtaining our supply of labor, has conscientiously endeavored to supply us with tunnel men suitable for this job. However, despite the efforts of this agency, we have been able to date to obtain, out of the 230 men furnished to us, only about 30 experienced tunnel men really properly qualified for this work, although we have retained on call approximately 97 men, many of whom are lacking in qualifications and proper experi-

(Testimony of Stephen Davidson Bechtel.)

ence. The remainder of the 230 have either been discharged because of unfitness, as non-citizens, as physically unfit, have quit for other or better jobs, or have been reduced to lower classifications. From this you will observe that the labor turnover has been exorbitant, which tends to increase the hazards.

In addition to the men who have already been supplied there are, we understand, approximately 200 other men who have registered with the National Reemployment Service as tunnel men. From our experience to date we cannot expect to procure and hold, out of this available supply, a sufficient number of competent and experienced tunnel men with which to proceed satisfactorily and safely with the work involved unless we are permitted to work our tunnel crews on a 48-hour week. We believe, therefore, that the tunnel work should not be reopened until the present restriction of 30 hours per week is modified so as to eliminate unnecessary hazards to the men. We feel that in order to protect the project and the lives of the men working on it, this restriction must necessarily be modified so as to permit a 48-hour week for men working underground.

Such modification would affect the following classifications of men performing work underground:

(Testimony of Stephen Davidson Bechtel.)

Tunnel Shifters

Tunnel Miners

Tunnel Timbermen

Tunnel Shovel Operators

Tunnel Locomotive Operators

Tunnel Hoist Men

Tunnel Powdermen

Tunnel Brakemen

Tunnel Chuck Tender

Tunnel Mechanics

Tunnel Laborers

Tunnel Muckers

Tunnel Vibrators

Tunnel Tampers

Tunnel Form Men

Tunnel Concrete Men

Tunnel Concrete Finishers

Tunnel Cement Gun Operators

Tunnel Pump Men

Tunnel Concrete Laborers

Tunnel Drill Operators

Tunnel Electrical Workers

Tunnel Labor—Unskilled

Tunnel Plumbers

Tunnel Portable Hoist Engineers

Tunnel Power Shovel Operators

Tunnel Track Men

In addition, men falling in a few other classifications would be affected during those periods of time in which their principal duties would be

(Testimony of Stephen Davidson Bechtel.)

in connection with the underground portions of the project. All men subject to the modification would be carried on a separate payroll in order to minimize the possibility of confusion, incorrect classification or other mistakes.

As noted above, no changes in rates of pay, classifications, overtime provisions or other conditions affecting the men are requested or will be made.

In conclusion, may we reiterate our belief that the determination requested herein is absolutely necessary in order to safeguard the lives of our employees and to insure the completion of the project in a proper manner. We request that you examine the Broadway Low Level Tunnel Project and determine that, as to the underground portions in connection with the construction of the tunnels, the application of the provisions of Section 653c-1 is impractical and that a 48-hour week be authorized for such work.

Respectfully yours,

SIX COMPANIES OF
CALIFORNIA,

By S. D. BECHTEL,

President.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. W. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

Gentlemen, I also wish to offer a letter from the Six Companies, signed by Mr. Bechtel, to the Board of Directors, dated December 5, 1934, which would be apparently the supplemental application with respect to the 30-hour week, that paralleled the one that he had filed with Mr. Reardon. [1064]

Mr. Marrin: No objection.

Mr. Tinning: If your Honor please, we offer a letter signed by Mr. Bechtel as President of the Six Companies of California, addressed to the Board of Directors Joint Highway District No. 13 of the State of California, dated December 5, 1934, and ask that it be admitted in evidence as Defendant's Exhibit in proper order.

(The letter was marked "Defendant's Exhibit X.")

DEFENDANT'S EXHIBIT X

Builders of Low Level Broadway Tunnel

Six Companies of California

155 Sansome Street

San Francisco, Calif.

December 5, 1934

Board of Directors,

Joint Highway District

No. 13 of the State of California,

1448 Webster Street,

Oakland, California.

Gentlemen:

The Broadway Low Level Tunnel Project involves construction work of a hazardous and

(Testimony of Stephen Davidson Bechtel.)

dangerous character. The safety of the men and the work largely depends upon the experience and ability of the tunnel men employed on the job. All concerned should take every possible step necessary to minimize the dangers and assure the safety of the men.

The tunnel work has been closed down, the principal reason being our inability, under existing restrictions in our contract and existing regulations in connection with the employment of labor, to procure an adequate supply of competent and experienced labor with which to construct the tunnels with any reasonable degree of safety to life and property.

Our inability to secure competent and experienced labor for the tunnel work arises out of the following conditions:

The tunnels are to be constructed through a part of the Coast Range mountains, which have a long history of difficult and dangerous tunnel construction, due in part to the constantly varying geological formations which are encountered in tunnel work in this range. Our own experience to date on the present project, indicating the presence of soft ground rather than hard rock, combined with the knowledge that the tunnels will cross the line of the Wildcat Fault, make it imperative that we anticipate similar difficulty on this job and organize and prepare plans and methods, including adequate super-

(Testimony of Stephen Davidson Bechtel.)

vision and an experienced and versatile working organization, which will enable us to cope with the conditions which we will probably encounter. The size of the tunnels which we are constructing, involving hazards many times greater than those of smaller tunnels constructed nearby, make their construction a dangerous operation and make such precautions absolutely essential.

We have taken all possible steps to be in a position to meet the conditions which we foresee, but without an adequate supply of experienced tunnel men the progress and safety of the project and the safety of human life will be seriously endangered. Improper timbering or blasting, improper performance of the other required operations, or the inability adequately to meet an emergency will inevitably endanger the lives of all the men working in the tunnels and may result in a serious catastrophe. It is impossible, of course, to give minute supervision to the details of the work each man is doing and it is therefore essential that only experienced and competent men be placed on the work. We must have men experienced in soft and wet tunnel construction, as well as men experienced in the construction of large diameter tunnels.

The number of available competent men has been reduced because of the large amount of tunnel and mining work being performed in the West at the present time. While under the pro-

(Testimony of Stephen Davidson Bechtel.)

visions of our contract we are restricted to a 30-hour week, men are permitted to work much longer hours, running as high as 60% in excess of our maximum, on the other work, resulting in increased weekly earnings amounting in some cases to 50% more than the earnings of our men, although the hourly rate of pay is the same or less than ours.

Our experience in the last three months has indicated that we cannot obtain for or hold on this job a sufficient number of qualified and experienced tunnel men unless the existing restriction on the hours of work per week is relaxed so that we may employ men on a basis comparable to that prevailing elsewhere. During the past several months the National Re-employment Service, the agency through which under the provisions of our contract we are obtaining our supply of labor, has conscientiously endeavored to supply us with tunnel men suitable for this job. However, despite the efforts of this agency, we have been able to date to obtain, out of the 230 men furnished to us, only about 30 experienced tunnel men really properly qualified for this work, although we have retained on call approximately 97 men, many of whom are lacking in qualifications and proper experience. The remainder of the 230 have either been discharged because of unfitness, as non-citizens, as physically unfit, have

(Testimony of Stephen Davidson Bechtel.)

quit for other or better jobs, or have been reduced to lower classifications. From this you will observe that the labor turnover has been exorbitant, which tends to increase the hazards.

In addition to the men who have already been supplied there are, we understand, approximately 200 other men who have registered with the National Reemployment Service as tunnel men. From our experience to date we cannot expect to procure and hold, out of this available supply, a sufficient number of competent and experienced tunnel men with which to proceed satisfactorily and safely with the work involved unless we are permitted to work our tunnel crews on a 48-hour week and unless we are given a more practical and satisfactory manner of procuring men.

We believe, therefore, that the tunnel work should not be reopened until the present restrictions and regulations as to employment of labor are modified so as to eliminate unnecessary hazards to the men. We feel that in order to protect the project and the lives of the men working on it, the present conditions of our contract restricting the hours of labor must necessarily be modified so as to permit a 48-hour week for men working underground.

Such a modification would affect the following classifications of men performing work underground:

(Testimony of Stephen Davidson Bechtel.)

Tunnel Shifters

Tunnel Miners

Tunnel Timbermen

Tunnel Shovel Operators

Tunnel Locomotive Operators

Tunnel Hoist Men

Tunnel Powdermen

Tunnel Brakemen

Tunnel Chuck Tender

Tunnel Mechanics

Tunnel Laborers

Tunnel Muckers

Tunnel Vibrators

Tunnel Tampers

Tunnel Form Men

Tunnel Concrete Men

Tunnel Concrete Finishers

Tunnel Cement Gun Operators

Tunnel Pump Men

Tunnel Concrete Laborers

Tunnel Drill Operators

Tunnel Electrical Workers

Tunnel Labor—Unskilled

Tunnel Plumbers

Tunnel Portable Hoist Engineers

Tunnel Shovel Operators

Tunnel Track Men

In addition, men falling in a few other classifications would be affected during those periods of time in which their principal duties would be

(Testimony of Stephen Davidson Bechtel.)

in connection with the underground portions of the project. All men subject to the modification would be carried on a separate payroll in order to minimize the possibility of confusion, incorrect classification or other mistakes.

No changes in rate of pay, classifications, overtime provisions or other conditions affecting the men are requested or will be made.

In conclusion, may we reiterate our belief that the modification requested herein is absolutely necessary in order to safeguard the lives of our employees and to insure the completion of the project in a proper manner. We respectfully request that you immediately take such action as may be appropriate to permit us to carry on our underground operations on the Broadway Low Level Tunnel Project on a 48-hour week.

Respectfully yours,

SIX COMPANIES OF
CALIFORNIA,

By (Signed) S. D. BECHTEL,

President.

SDB:DP

[Endorsed]: Received Dec. 6, 1934. Joint Highway Dist. No. 13. L. V. Eaton, Ass't Secretary.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. *Plff's* Ex. X. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

And the record should show that this is a supplemental application that the Six Companies made to the Joint Highway District respecting the 48-hour week filed the day after the hearing in San Francisco.

Q. Mr. Bechtel, I would like you to look at Exhibit X, which has just been introduced in evidence, which is a copy of your letter dated December 5, 1934, and I will ask you to look at the last paragraph on the first page, where you state:

"The tunnels are to be constructed through a part of the Coast Range mountains, which have a long history of difficult and dangerous tunnel construction, due in part to the constantly varying geological formations which are encountered in tunnel work in this range. Our own experience to date on the present project, indicating the presence of soft ground rather than hard rock, combined with the knowledge that the tunnels will cross the line of the Wildcat Fault, make it imperative that we anticipate similar difficulty on this job and organize and prepare plans and methods, including adequate supervision and an experienced and versatile working organization, which will enable us to cope with the conditions which we will probably encounter. The size of the tunnels which we are constructing, involving hazards many times greater than those of smaller tunnels constructed nearby, make their

(Testimony of Stephen Davidson Bechtel.)

construction a dangerous operation and make such precautions absolutely essential." [1065]

Now, Mr. Bechtel, when you wrote that letter and were referring to smaller tunnels constructed nearby, you knew that the difficulties that you anticipated in this tunnel were greater than those anticipated in driving through the Claremont Tunnel, didn't you?

A. I am not quite sure of your point.

Q. Read the question.

(Question repeated by the reporter.)

A. Yes.

Q. And when you were referring, when you were discussing the testimony before Mr. Reardon submitted on the previous day to this letter you stated that you expected at the time you testified, on the 4th of December, that you soon would emerge into conditions that would be good or better than any you had encountered. When you wrote this letter on the 5th of December, 1934 you stated that you expected difficult conditions, so as a matter of fact you were expecting exactly what you found there, weren't you?

A. Yes, immediately in front of where we were, we expected bad ground conditions, for the reason that we had wound up these drifts, ended these drifts in formation that had continued to be bad; we did not know how much further we would find it, and we always had the hope that we would get into the better ground which had been prophesied in the

(Testimony of Stephen Davidson Bechtel.)

geological report and on which we had predicated our plans and estimates of construction on, and we were preparing for that worst condition, we were preparing so that we could adequately and competently meet the conditions if it did continue difficult.

Q. You stated that:

“Our own experience to date on the present project, indicating the presence of soft ground rather than hard rock, combined with the knowledge that the tunnels will cross the line of the Wildcat Fault, make it imperative that we anticipate similar [1066] difficulty on this job, and organize and prepare plans and methods.”

A. Yes.

Q. You were referring, when you wrote that sentence, to the preceding portion of the paragraph in which you say that the tunnels which had been constructed through a part of the Coast Range Mountains, and these are to be constructed through a part of the Coast Range Mountains, which have a long history of difficult and dangerous tunnel construction—that is what you were referring to, was it not, what you meant in answering my question before you heard about the geological report?

A. I do not think that can be answered “Yes” or “No.”

Q. Well, now, let me see if we can get clear on that. In your first sentence of this exhibit you state

(Testimony of Stephen Davidson Bechtel.)

—I am referring now to Exhibit X—the first sentence in paragraph 4 on the first page you state: “The tunnels are to be constructed through a part of the Coast Range of mountains”—you are referring to the Broadway Tunnel there, aren’t you?

A. Yes.

Q. “which have a long history of difficult and dangerous tunnel construction”—that refers to the Coast Range of mountains, does it not?

A. Yes.

Q. “due in part to the constantly varying geological formations which are encountered in tunnel work in this range.”

A. Yes.

Q. You were referring to the geological conditions which were encountered in tunnel work in the Coast Range Mountains?

A. Yes. And that must be tied together with the other parts of the letter, be considered, in order to get an intelligent reflection of what we were presenting here, which was the purpose of the other letter, the other parts of the letter, and the subsequent parts of that paragraph.

Q. All right. “Our own experience to date on the present project, indicating the presence of soft ground rather than hard [1067] rock”—that was your own experience, indicating the presence of soft ground rather than hard rock?

A. Yes. Up to that time we had experienced soft ground instead of hard rock.

Q. “combined with the knowledge that the tun-

(Testimony of Stephen Davidson Bechtel.)

nels will cross the line of the Wildecat Fault"—you are referring to the Broadway Tunnel crossing the Wildecat Fault, in your experience?

A. Yes, the inference—it refers to the Wildecat Fault going through, our deduction from the geological report prepared by Louderback; that is where the information came from, that is, where the deduction was made from, and that is what we were still hoping we would get, better ground rather than soft ground; the Wildecat Fault was some place in the middle of the hill, or ahead of us, and provide for conditions so as to meet that condition we had hoped to in between.

Q. And those conditions—your own experience indicating the presence of soft ground rather than hard rock, and the anticipation that you would cross Wildecat Fault, make it imperative that we anticipate similar difficulty on this job—the similar difficulty that you refer to is the difficulty of long history of difficult and dangerous tunnel construction, is it not?

A. Yes, on part of several of these tunnels that have been referred to, on the Hetch Hetchy Tunnels, parts of them were difficult, on parts of the Claremont Tunnel they were difficult, at the same time parts of both the Hetch Hetchy Tunnel and the Claremont Tunnel, and other tunnels in that area had been good, and you have to weigh those things in order to get the real situation in any degree.

Mr. Tinning: Gentlemen, we wish to introduce a copy of order of the Industrial Accident Commis-

(Testimony of Stephen Davidson Bechtel.)

sion, dated the 5th day of December, 1934, subject to your check, but it is a copy. [1068]

Mr. Marrin: Yes.

Mr. Tinning: Under which letter a 40-hour week was granted. If your Honor please, without reading it, we offer in evidence the order of the Department of Industrial Relations of the State of California, dated December 5, 1934, authorizing the contractor to employ men on the Broadway Tunnel in accordance with its application 40 hours per week, and ask that the same be marked "Defendant's Exhibit Y."

(The document was marked "Defendant's Exhibit Y.")

DEFENDANT'S EXHIBIT Y

Before the Department of Industrial Relations
of the State of California

In the matter of the petition of the Six Companies of California concerning work being performed under contract with Joint Highway District No. 13 of the State of California for the construction of the Broadway Low Level Tunnel Project.

ORDER

This matter coming on to be considered upon the petition of the Six Companies of California to exempt from the provisions of Section 653c-1 of the Penal Code, work connected with the

(Testimony of Stephen Davidson Bechtel.)

contract between the said Six Companies of California and the Joint Highway District No. 13 of the State of California, for the construction of the Broadway Low Level Tunnel Project, and it further appearing that the construction work provided for in said contract is of a hazardous and dangerous character and that the safety of the men and the work largely depends upon the experience and ability of tunnelmen employed on the job, and it further appearing that all concerned should take every possible step to minimize the dangers and assure the safety of the men employed in the said undertaking, and further acting upon my own knowledge of the matters and things in said petition set forth.

I, T. A. Reardon, as Director of the Department of Industrial Relations, by virtue of the authority in me vested, hereby find that such petition should be granted.

Accordingly it is determined that the application of the provisions of the present 30 hour week law as contained in an act adding a new section to the Penal Code of California to be numbered section 653c-1 is impractical as to those employed in the tunnel work and that the said petitioner be and it is hereby permitted to employ men in the work herein described for a period not to exceed 48 hours in each week.

This determination is subject to such re-

(Testimony of Stephen Davidson Bechtel.)

vision or modification as future economic conditions may justify.

[Seal] (Signed) T. A. REARDON,
Director.

Dated at San Francisco, California, on this
5th day of December, 1934.

State of California,
City and County of San Francisco—ss.

I, Lulu P. Loveland, a Notary Public in and for the City and County of San Francisco, State of California, residing therein, duly commissioned and sworn, do certify that on this 5th day of December, 1934, I carefully compared the annexed copy of order re: in the matter of petition of Six Companies of California concerning work being performed under Contract with Joint Highway District No. 13 of the State of California—construction of Broadway Low Level Tunnel Project, signature T. A. Reardon, Director with the original thereof, now in the possession of Six Companies of California of San Francisco, State of California, and that the same a full, true, and exact copy of said original.

In witness whereof, I have hereunto set my hand and affixed my official seal at my office in the City and county of San Francisco, the

(Testimony of Stephen Davidson Bechtel.)

day and year in this certificate first above written.

LULU P. LOVELAND,

[Not'l Seal]

Notary Public in and for the
City and County of San
Francisco, State of Cali-
fornia.

My Commission expires December 8, 1934.

(Certificate of Notary to Copy of Document.)

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. Y. Filed April 26, 1938.
Walter B. Maling Clerk. By J. A. Schaertzer,
Deputy Clerk.

If your Honor please, we now offer in evidence a letter from the United States Department of Agriculture, Bureau of Public Roads, District No. 2, dated December 19, 1934, addressed to Wallace B. Boggs, District Engineer, authorizing the contractor on this project to work men on the underground work 40 hours per week. We ask that the authority to the District dated December 19, 1934 be marked Defendant's Exhibit Z.

(The document was marked "Defendant's Exhibit Z.")

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT Z

United States Department of Agriculture
Bureau of Public Roads

District No. 2

Phone: Sutter 3861,
461 Market St.,
San Francisco, California.

December 19, 1934.

In your reply please refer to File No.

Mr. Wallace B. Boggs,

District Engineer,

Joint Highway District No. 13,

1448 Webster Street,

Oakland, California.

Dear Sir:

On December 10, 1934, I received from the Secretary of Joint Highway District No. 13 of the State of California a letter dated December 8 enclosing four certified copies of the application of Six Companies of California, a corporation, the contractor now constructing the project of Joint Highway District No. 13 of the State of California, known as the "Broadway Low Level Tunnel," for a waiver of the provisions of Subsection (b) of Section 1 of Paragraph 20 of the contract to permit said contractor to employ men in the tunnel work not exceeding 48 hours per week, together with

(Testimony of Stephen Davidson Bechtel.)

four certified copies of the resolution of the Board of Directors directing that said application be submitted to the United States Bureau of Public Roads, the Government Engineer under the terms of said contract, for such action as the Government Engineer may consider proper. The Secretary requested me to advise you of my action in respect to said application.

After considering the application of Six Companies of California; the order of T. A. Rear-don, Director of the Department of Industrial Relations of California, permitting Six Companies to employ men on tunnel work on the construction of the Broadway Low Level Tunnel not to exceed 48 hours in each week; and letter from R. C. Stillwell, Veterans' Representative, State of California, dated December 10, acting for Mr. John A. Stellern, State Director of the National Reemployment Service, State of California, copy of which is enclosed; Mr. Stellern's letter dated December 15, concurring in Mr. Stillwell's letter, copy enclosed; and after further investigation by the Bureau of Public Roads it is in my judgment not practicable nor feasible, particularly considering safety of workmen, to proceed with the tunnel work on a thirty (30) hour per week basis. Under no circumstances, however, can forty-eight (48) hours per week be granted, but you are authorized to waive the provisions of Sub-

(Testimony of Stephen Davidson Bechtel.)

section (b) of Section (1) of Paragraph 20 of the contract dated June 4, 1934 between Joint Highway District No. 13 of the State of California and Six Companies of California, contractor, and permit the contractor to employ men on tunnel work not to exceed forty (40) hours in any one week, nor more than eight (8) hours in any one day.

If satisfactory as to details the following classification of men performing work in the tunnel as submitted in the application of Six Companies of California, should be adopted and these men should be carried on a separate payroll:

- Tunnel Shifters
- Tunnel Miners
- Tunnel Timbermen
- Tunnel Shovel Operators
- Tunnel Locomotive Operators
- Tunnel Hoist Men
- Tunnel Powdermen
- Tunnel Brakemen
- Tunnel Chuck Tender
- Tunnel Mechanics
- Tunnel Laborers
- Tunnel Muckers
- Tunnel Vibrators
- Tunnel Tampers
- Tunnel Form Men
- Tunnel Concrete Men

(Testimony of Stephen Davidson Bechtel.)

Tunnel Concrete Finishers

Tunnel Cement Gun Operators

Tunnel Pump Men

Tunnel Concrete Laborers

Tunnel Drill Operators

Tunnel Electrical Workers

Tunnel Labor—Unskilled

Tunnel Plumbers

Tunnel Portable Hoist Engineers

Tunnel Power Shovel Operators

Tunnel Track Men.

Yours very truly,

(Signed) C. H. SWEETSER,
District Engineer.

[Endorsed]: Received Dec. 20, 1934. Joint Highway District No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. Z. Filed April 26, 1938. Walter B. Maling Clerk. By J. A. Schaertzer, Deputy Clerk.

I offer now in evidence a letter dated December 27, 1934, addressed to Six Companies of California, by Joint Highway District No. 13 of the State of California, signed by Thomas E. Caldecott, President, and by Harry M. Stow, Secretary, to which is attached a copy of Mr. Sweetser's letter of December 19, 1934, this letter being the authority to Six Companies of California to employ men on the tunnel project 40 hours per week, according to their

(Testimony of Stephen Davidson Bechtel.)

application for 48, and the authority received from the Bureau of Public Roads to employ the men 40 hours a week. I think it is proper to make the statement at this time that on this work—I am sure counsel will agree with me, so there is no reason for spending time on it, the P.W.A., the Public Works Emergency Administration who made the grant in this matter, turned [1069] over all road projects to the Bureau of Public Roads of the Department of Agriculture, and made the District Engineer of the Bureau of Public Roads officiate in the same way as the State Engineer, P.W.A., officiates in all other P.W.A. projects, so that throughout this case if the matter comes up this P.W.A., the Bureau of Public Roads, the term is synonymous, that the District Engineer of the Bureau of Public Roads was the State Engineer to promulgate all of the P.W.A. regulations through the district, and the contractor and the one whom the contractor and the district had to keep in contact with on the work under this project.

(The letter was marked "Defendant's Exhibit AA.")

[Set forth in the Book of Exhibits at page 377.]

[1070]

Mr. Tinning: If your Honor please we offer in evidence a letter from Six Companies of California dated December 26, 1934, signed by T. M. Price, Project Manager. We ask that it be marked in evidence as Defendant's Exhibit "BB."

(Testimony of Stephen Davidson Bechtel.)

(The letter was marked "Defendant's Exhibit BB.")

Mr. Trefethen: To whom is that addressed, Mr. Tinning?

Mr. Tinning: That is addressed to Wallace B. Boggs, District Engineer.

[Set forth in the Book of Exhibits at page 382.]

[1071]

Q. Mr. Bechtel, prior to December 26, 1934, was there ever any communication from Six Companies of California to the District respecting engineering, so far as you know?

A. So far as I know, there was not.

Q. This was the first communication on that subject?

A. There may have been some; but, so far as I know, there was not.

Mr. Tinning: If the Court please, we offer, as Defendant's Exhibit "CC," a letter from Mr. Wallace B. Boggs, District Engineer, addressed to Six Companies of California, in reply to the preceding exhibit. I might state to your Honor that last week Mr. Marrin adopted a subject, methods of engineering, and different subjects that he had; and we are attempting to put in our exhibits in chronological order, so that, by dates, as the drama develops, we will have a complete history as we go along.

(The letter was marked "Defendant's Exhibit CC.")

Mr. Tinning: This letter reads as follows:

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT CC

January 3, 1935.

File: Broadway Tunnel.
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

Your communication of December 26, 1934, with blue prints attached, and referring to tunnel excavation methods, is acknowledged. It is my understanding that the methods shown and described are subject to such changes as may be necessary to meet ground conditions.

With respect to your outline of engineering work which you desire the District to perform in connection with the establishment of lines and grades, I wish to advise you that the District Engineer will continue to establish lines and grades on a single base line in each tunnel, and that any additional points which your working crews require should be furnished by your own engineering organization as required by the specifications.

Yours very truly,
(Signed) W. B. BOGGS,
District Engineer.

WBB:VF

(Testimony of Stephen Davidson Bechtel.)

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. CC. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1073]

Mr. Tinning: I offer in evidence, your Honor, as Defendant's "DD," a letter dated January 9, 1935, from Wallace B. Boggs, District Engineer, to Six Companies of California.

(The letter was marked "Defendant's Exhibit DD.")

Mr. Tinning: I will read this letter:

DEFENDANT'S EXHIBIT DD

January 9, 1935.

File: Broadway Tunnel Schedule.

Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

In confirmation of our conversation of January 5 with respect to postponement of work on certain structures, you are advised as follows:

Conditions are unfavorable for work on the Golden Gate Overhead Structure due to the fact that the footing excavations which were

(Testimony of Stephen Davidson Bechtel.)

opened up more than a month ago have been damaged by exposure to heavy rainfall. It will not be feasible to proceed with the completion of these footings until the rainy season is over and the damage can be satisfactorily repaired.

It is not advisable to start footing excavations on the Landvale Overhead and Viaduct structures until the rainy season is over. Conditions similar to those now existing on the Golden Gate Overhead Structure will undoubtedly result if these excavations were made and exposed to the rainy weather which may reasonably be anticipated.

The right-hand Service Road walls at the West Portal southerly from the South buttress of the Portal Buildings cannot be constructed until the fills which have been necessary on account of excessive excavation shall have been thoroughly consolidated and no longer subject to settlement.

Reference is made to Section 6, Subsection (r) "Temporary Suspension of Work" of the specifications, and you are directed that work on the above structures shall not proceed until conditions are considered favorable by the District Engineer. Such postponement shall not constitute a basis for any extension of time for the completion of the contract.

(Testimony of Stephen Davidson Bechtel.)

It is noted that the schedule submitted by you in August, 1934, contemplated the completion of these units by December 1, 1934; if such progress had been made, the conditions now existing with respect to the Golden Gate and Landvale structures could probably have been avoided.

Very truly yours,

(Signed) WALLACE B. BOGGS,
District Engineer.

WBB/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex DD. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1074]

Mr. Tinning: Q. Mr. Bechtel, simply for the purpose of showing where these other structures were, the Landvale structures were cement structures, to be encountered for an overpass over the main highway where the north and south route intersects the east and west route? A. Yes.

Q. That is the general description. And, at that point, there was [1075] a subway constructed for the railroad, and there was also an overhead viaduct, which ran across the main line of the highway, to carry the north and south traffic there?

A. Yes.

Q. The Golden Gate structure was a bridge down near the westerly end of the project where it crossed a deep ravine,—rather heavy bridge—

(Testimony of Stephen Davidson Bechtel.)

A. It was over an existing street.

Q. —over an existing street, where there was a valley and a street running down?

A. This was not in the valley; it was the valley —the easterly side of the valley.

Mr. Tinning: We offer in evidence, on behalf of the defendant, as Defendant's Exhibit "EE," a letter signed by Six Companies of California, S. D. Bechtel, President, addressed to Joint Highway District, dated January 12, 1935, in reply to Mr. Boggs' letter, which was the previous exhibit,—January 12, 1935—

Well, your Honor, I would like to withdraw the offer and have an order so made; this letter is the same as Mr. Marrin and Mr. Smith put in last week,—Plaintiff's Exhibit No. 53; so we now have the continuity of the record. The letter referred to, Plaintiff's Exhibit No. 53, is already in evidence,—the reply of Six Companies to Mr. Boggs' letter with respect to the outside work; so we will withdraw the last exhibit.

The Court: We will take a recess for five minutes.

(Recess.) [1076]

Mr. Tinning: If your Honor please, we offer in evidence a letter dated January 18, 1935, sent by Six Companies of California, T. M. Price, Project Manager, to Wallace B. Boggs, District Engineer,

(Testimony of Stephen Davidson Bechtel.)
and ask that it be marked in proper order, which I think is EE.

(The letter was marked "Defendant's Exhibit EE.")

I will read it:

DEFENDANT'S EXHIBIT EE

Builders of Low Level Broadway Tunnel.
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

January 18, 1935.

(Received Jan. 19, 1935, Joint
Highway Dist. No. 13)

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Dear Sir:

We wish to acknowledge your letter of January 9th, directing us to suspend operations on certain structures until conditions are considered favorable by the District Engineer.

This is entirely satisfactory with us. However, we note that you state that such postponement shall not constitute a basis for any extension of time for the completion of the contract. We would like to ask your reconsidera-

(Testimony of Stephen Davidson Bechtel.)

tion of this, in accordance with Paragraph C, Section 4 of the Specifications, wherein it is stated that if stormy or inclement weather unavoidably delays the work such time shall be added to the aforesaid time for completion.

We are not certain that we will need such an extension. However, the grading of the road is being held up subject to completion of the structures and if the grading is delay in the summer of 1935 to a date that will make it impractical to lay the oil surfacing, it might be advisable to postpone such surfacing until the spring of 1936.

Under such a condition, we believe that a request for extension of time on this account would be in order.

Yours very truly,
SIX COMPANIES OF
CALIFORNIA,

(Signed) By T. M. PRICE,
Project Manager.

[Endorsed]: Received Jan. 19, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal.* No. 20101-R. Deft's Ex. EE. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1077]

(Testimony of Stephen Davidson Bechtel.)

The next in chronological order is a letter that was introduced as Plaintiff's Exhibit No. 54, from Mr. Boggs to the Six Companies, and for the purpose of continuity we will refer to it. It was a letter dated January 22, 1935, in which Mr. Boggs says he was unable to agree with Six Companies' contention respecting engineering lines and grades.

Defendant offers as Defendants' Exhibit FF a letter from Mr. Boggs, District Engineer, to Six Companies of California, dated January 23, 1935, which reads as follows:

DEFENDANT'S EXHIBIT FF

January 23, 1935.

File: Broadway Tunnel Extension,
Schedule Time.

Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

Your communication of January 18, 1935, with reference to the suspending of operations on certain structures, is acknowledged.

With respect to your request for reconsideration of the decision of the District Engineer that the above suspension should not constitute a basis for extension of time for completion of the project, you are advised as follows:

(Testimony of Stephen Davidson Bechtel.)

The structures upon which work is temporarily suspended are along the West Approach roadways and connections. The time required to complete these units is relatively short, as indicated on your submitted schedule; related work, which cannot be performed until these structures are completed, is small, and would not require any considerable time for performance. Other phases of the work, upon which the time of completion of these structures can have no bearing, would seem to be the controlling factors with respect to completion of the Contract on schedule time; these other phases are not affected by the suspension order.

Therefore, it does not appear that the suspension ordered by the District Engineer can in any way constitute a basis for the granting of an extension of time for the completion of the project.

Yours very truly,

(Signed) WALLACE B. BOGGS,

District Engineer.

WBB/VE

CC to Mr. Archibald B. Tinning, Attorney,
Martinez.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. FF. Filed April 26, 1938.
Walter B. Maling, Clerk. By J. A. Schacrtzer,
Deputy Clerk. [1078]

(The letter was marked "Defendant's Exhibit
FF.")

(Testimony of Stephen Davidson Bechtel.)

If your Honor please, Defendant offers in evidence a letter dated January 24, 1935, from Six Companies of California, signed by T. M. Price, Progress Manager, addressed to Wallace B. Boggs, District Engineer, as Defendant's Exhibit GG.

(The document was marked "Defendant's Exhibit GG.")

DEFENDANT'S EXHIBIT GG

Builders of Low Level Broadway Tunnel
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

January 24, 1935.

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Dear Mr. Boggs:

Acknowledging your letter of January 23rd, relative to extension of time on account of suspending operations on certain structures.

We do not mean our previous letter to be an application for extension of time but wish merely to call your attention to the paragraph of the Specifications governing this.

We merely wish to put ourselves on record in the matter with the thought that actual decision as to extension might be made at the time

(Testimony of Stephen Davidson Bechtel.)

application is made if decided necessary and provided by the specifications.

Yours very truly,

**SIX COMPANIES OF
CALIFORNIA,**

By (Signed) T. M. PRICE,
Project Manager,

[Endorsed]: Received January 25, 1935. Joint Highway District No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. GG. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

If your Honor please, Defendant offers in evidence as Defendant's Exhibit HH the letter dated February 5, 1935, from Wallace B. Boggs, District Engineer, to Six Companies of California, which reads as follows:[1079]

DEFENDANT'S EXHIBIT HH

February 5, 1935.

File: Broadway Tunnel

Schedule of construction.

Six Companies of California,
Field Office,

Post Office Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

A construction schedule showing anticipated progress on various sections of the work was

(Testimony of Stephen Davidson Bechtel.)

submitted by you on August 9, 1934.

An examination of this schedule at the present time shows that the progress indicated thereon has not been maintained, especially with respect to the tunnel, which would appear to be the controlling factor in completing the Contract within the specified time.

You are hereby requested to submit immediately a revised construction schedule indicating the progress you expect to maintain on the various units of the work.

Kindly submit this schedule in triplicate.

Very truly yours,

(Signed) WALLACE B. BOGGS,

District Engineer.

WBB/VE

CC to Mr. C. H. Sweetser, District Engineer,
U. S. Bureau of Public Roads, S. F.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. HH. Filed April 26, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit HH.")

There has already been introduced in evidence as Defendant's Exhibit O a schedule showing the proposed rate of progress on this work which was submitted to the district by Six Companies of California, with its letter of February 12, 1935. I am

(Testimony of Stephen Davidson Bechtel.)

going to ask some questions about that, Mr. Bechtel. Would you like to have the exhibit before you?

A. Yes.

Q. I am now referring to Defendant's Exhibit O, which was the schedule which was submitted on February 12, 1935, to the District. Mr. Bechtel, when you submitted the schedule with the letter of February 12, 1935, no communication was sent to the district in which you in writing objected or stated that the work had been held up due to the fact that you were deceived or misled by the ground conditions that you had encountered up to that time? [1080]

Mr. Marrin: You say that he sent that. It is not a fact that he sent it.

Mr. Tinning: The Six Companies sent it. That is a fact, you made no complaint in writing or otherwise that you had been deceived by ground conditions at the time you submitted this schedule?

A. To the best of my knowledge you are correct.

Q. That schedule of your proposed progress and schedule for construction was submitted by Six Companies following the request of Mr. Boggs which was dated February 5, 1935?

A. It appears that way.

Q. At this time, Mr. Bechtel, what steps had been taken on the work to place the concrete lining

(Testimony of Stephen Davidson Bechtel.)

in the tunnels as you proceeded with the excavation?

A. This schedule was submitted to you by Mr. T. M. Price, our Project Manager. The question you just asked, I believe, could be best answered by Mr. Price, who was there full time, and I think, and it is my understanding that it is proposed by our counsel to develop that point thoroughly by Mr. Price and by other witnesses.

Q. You seem fully advised on that. What was your knowledge of what steps had been taken at the tunnel on February 12, 1935 with respect to proceeding with the concreting?

A. I was familiar constantly throughout the job of the general plans of construction and the general procedure which was being followed. So far as the details at this particular time, I think that can be best developed by Mr. Price.

Q. You know, do you?

A. I can't say at this time.

Q. Did you know then? A. Yes.

Q. You have forgotten?

A. I do not recall at this moment.

Q. Isn't it a fact that at this time on the job there were no concrete forms?

A. I can't answer that.

Q. Isn't it a fact that the concrete forms were not ordered until [1081] sometime in May?

A. I do not recall the date.

Q. You don't recall? A. No.

Q. Isn't it a fact that there was no concrete ag-

(Testimony of Stephen Davidson Bechtel.)

gregates plant in place or in operation on the job on February 12, 1935?

A. I do not recall. I believe you can get that information from Mr. Price, and subsequent other men. I will get it for you, Mr. Tinning, if you like, but I have not it available.

Q. You were not following it very closely?

A. I was following it very closely.

Q. What is the reason you cannot tell us in what stage the preparations were with respect to your concrete lining at that time?

A. For the reason that we had on the job a competent organization that we had trusted with the job. We had as a company policy an executive committee of which I was chairman, of which Mr. H. J. Lawler, of the Utah Construction Company was a member, and of which Mr. Frank Modglin was also a member; we three, and more particularly Mr. Lawler and I, were constantly in touch with the project matters of major importance and major policy, and the detail of handling the project, of the day by day details, and the day by day relations with the district were handled by the field organization that we had selected, and in whom we had placed confidence and whom we placed there for that purpose.

Q. The answer to my question is you don't know whether there was concrete forms on the job at that time?

A. I do not recall.

(Testimony of Stephen Davidson Bechtel.)

Q. Did Mr. Larson, your tunnel superintendent, tell you that the concrete should be kept up in the tunnel to within 300 to 350 feet of the excavated face?

A. I do not recall any such statement.

Q. You don't recall that? A. No.

Q. Do you think it ought to be?

A. It depends on the conditions. [1082]

Q. Do you think that under the conditions in the Broadway Low Level Tunnel that the concrete should have been kept up to from 300 to 350 feet of the excavated face?

A. Looking back on it I would say yes.

Q. Did you believe that in February 1935?

A. I don't recall whether I believed it at that time.

Mr. Tinning: I will offer in evidence, if your Honor please, a letter dated April 2, 1935, from Six Companies of California, signed T. M. Price, Project Manager, addressed to Wallace B. Boggs, District Engineer, as Defendant's Exhibit II. I will read it:

[Set forth in the Book of Exhibits at page 389.]

[1083]

(The letter was marked "Defendant's Exhibit II.")

I offer in evidence as Defendant's Exhibit JJ a letter from Wallace B. Boggs, District Engineer, to the Six Companies of California, dated April 9, 1935. It reads:

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT JJ

April 9, 1935.

File: Broadway Tunnel Concreting.

Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

On April 2 you furnished me with your Drawing No. 19 entitled, "Sketch Showing Form and Concreting Arrangements, March 22, 1935", together with a letter setting forth general methods of operation.

While it is evident that this drawing does not show complete details and it is assumed that you will have worked out such details before commencement of the operation, the following comments are made on points which would seem to indicate the necessity of further study:

1. Details are not shown as to how the upper pipe will be supported when advanced to extreme position.
2. No provision is shown for handling the upper pipe should the situation arise that a double row of reinforcing steel would be required.

(Testimony of Stephen Davidson Bechtel.)

3. In case one pump breaks down, some type of cross-over connection may be necessary in order to keep the height of concrete the same on both sides.

4. It would appear that the shape of the upper section of the elephant trunk will cause the spilling over of concrete in dropping past the gate.

5. Consideration should be given to the slope of chutes, particularly the upper chute. Slopes should be sufficient so that concrete of the designed consistency will flow.

6. Provisions for jacking forms during pour are not shown.

7. It is assumed that you are satisfied, from your own experience, that the gate devices in the lower pipe lines will function satisfactorily.

8. No detail is shown of method of handling 9-ft. segments on curves. Your attention is directed to the necessity of obtaining smooth lines without fins.

9. Method of filling upper part of arch is not clear. This refers especially to getting the concrete in, around and back of the timbers.

10. Will the annular construction joints in the arch ring coincide with the construction joints in the finished wall section?

(Testimony of Stephen Davidson Bechtel.)

11. Has consideration been given, when determining that form section shall be 27 feet in length, to the time cycle for the various operations in order to complete the construction within the time limit?

These comments are based upon the preliminary design shown and it is assumed that more details will be submitted for discussion as your design progresses.

The District Engineer will be pleased to discuss these matters with you from time to time as you desire.

Yours very truly,

(Signed) WALLACE B. BOGGS,

District Engineer.

WBB/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. JJ. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1084]

(The letter was marked "Defendant's Exhibit JJ.")

Q. Mr. Bechtel, at the time the Six Companies received this letter, did you complain that you had been deceived about ground conditions and that it had caused you to be delayed in the progress that you indicated by your schedule submitted in August, 1934?

A. What was the date of this letter?

(Testimony of Stephen Davidson Bechtel.)

Q. April 9. A. I do not think so.

Q. As far as you know there was no complaint made at that time? A. Not then.

Q. How far underground were you about the 9th or 10th of April?

A. I don't recall that, Mr. Tinning.

Q. Did you give any consideration to paragraph 11 in the letter of Mr. Boggs dated April 9th, where he told you that your cycle of operations apparently had been worked out without giving consideration to the fact that you had a time limit on your contract work?

A. This letter was addressed to Mr. T. M. Price, as I understand it, was received by Mr. Price, on the job, was handled as a job matter, and is not a matter which would come to me.

Q. It did not go to the Executive Committee?

A. This was handled on the job.

Q. This letter did not come to the executive committee? A. Not that I know of.

Q. It is a fact that matters of time, extension of time within which the job would be completed, were matters that did not come to your executive committee?

A. No, that is not correct; the matter of time extension, and the general progress and general schedule, general methods, were discussed with our executive committee, [1086] and were discussed with the other directors of the Six Companies of California, and their advice gotten as to the proper

(Testimony of Stephen Davidson Bechtel.)

procedure and necessary action taken to carry the project forward in the most expeditious manner that was possible, or practical to arrange at that time.

Q. Then, so far as you know, no attention was paid to the provision of this letter of April 9, 1935, paragraph 11, "Has consideration been given, when determining that form section shall be 27 feet in length, to the time cycle for the various operations in order to complete the construction within the time limit?"

A. The proper procedure on a letter of that kind, the way we had them—

Q. I do not like to interrupt, but what I asked you was as to whether or not your committee gave any attention to that protest.

A. This letter did not come to the attention of the committee.

Q. Did your committee give any attention to it?

A. It did not come before the committee.

Q. And you made no complaint at that time?

A. I do not think so. Mr. Price may have but if so I don't know.

Q. The next matter in evidence is a letter dated April 19, 1935, in which Mr. Fry wrote to Mr. Price, which is already in evidence. It is Defendant's Exhibit F. That was with respect to conversations concerning the ground that Mr. Fry called to Mr. Price's attention.

Mr. Marrin: Mr. Bechtel's name was not mentioned in that letter.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: It was addressed to the Six Companies and Mr. Price the Project Manager.

If your Honor please, we offer in evidence a letter dated May 1, 1935, from Six Companies of California, signed by T. M. [1087] Price, Project Manager, addressed to Mr. Wallace B. Boggs, District Engineer, and ask it be marked Defendant's Exhibit KK.

(The letter was marked "Defendant's Exhibit KK.")

I will read it:

DEFENDANT'S EXHIBIT KK

Builders of Low Level Broadway Tunnel
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

May 1, 1935.

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District 13,
1448 Webster St.,
Oakland, Calif.

Dear Sir:

We are making plans for the driving of drifts from the east portal, to meet the driving from the west portal.

Our plans are not yet mature enough to advise you definitely as to what method will be

(Testimony of Stephen Davidson Bechtel.)

pursued; however, in general, we plan at present to drive two wall plate drifts in each bore, from twelve to sixteen feet above the grade line, by means of mucking machines and battery locomotives. We plan on installing sufficient plant on that end, to permit this construction.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA,

By (Signed) T. M. PRICE,
Project Manager.

[Endorsed]: Received May 2, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex KK. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Q. Mr. Bechtel, were you in touch with the situation at the tunnel at the time the decision was made on or about May 1 to drive the drifts from the east portal westerly toward the excavation?

A. Yes.

Q. At that time did you make any complaint in writing to the District that you had been deceived or misled by the geological report? A. No.

[1088]

Mr. Tinning: Q. At that time, did you make any complaint, in writing, to the District, that you

(Testimony of Stephen Davidson Bechtel.)

had been deceived or misled by the geological report? A. No.

Q. And by "you," I am referring to Six Companies. A. Not to the best of my knowledge.

Q. At that time,—referring to May 1st,—did Six Companies make any demand, in writing, for extra compensation, for extra work in excavation or extra cost of timbering?

A. To the best of my knowledge, no.

Q. You did not make any complaint of any kind at that time, did you?

A. Yes. Yesterday, or Friday, I reviewed to you the discussion I had with Mr. Boggs.

Q. Well, that was at some time in April or May? A. April or May.

Q. That was with respect to the time you were asking for time extension? A. That is correct.

Q. But you said nothing, at any conversation, to Mr. Boggs, or any representative of the District, regarding having been misled by geological report?

A. Well, the fact the ground conditions were different.

Q. Did you demand extra pay?

A. Not that I recall.

Q. Did you refuse to proceed with the work at that time? A. No; we did not.

Q. How many feet underground were the tunnels on May 1, 1935,—the main excavation,—approximately?

Mr. Marrin: Q. If you know.

(Testimony of Stephen Davidson Bechtel.)

A. I do not recall; but, I believe, about five or six hundred feet in each of the two tunnels.

Mr. Tinning: Q. That is about what Mr. Larson testified to; that happens to be almost synchronous with his leaving the work on the 30th of April. At that time, May 1, 1935, you had approximately [1089] 100 feet of concrete lining that had been placed in November of 1934, as you went underground; that has all be described in detail here; and there was no other concrete lining in the tunnel except that that had been placed approximately 6 months before?

A. Well, I am not clear on the date, Mr. Tinning; but approximately. My belief is that the concreting was resumed; however, that can be best developed from your point,—clarified,—by others, as they have pertinent information on that particular subject.

Q. Isn't it the fact, at the time you had this conversation with Mr. Boggs, that you referred to yesterday, in April or May, there were not concrete forms on the job and there was no concreting, no concrete aggregates plant ready for operation on the job, and that no concreting had been done since the first 200 feet in rings had been put in, in November of 1934,—100 feet in each tunnel?

A. I don't recall.

Q. You don't recall that? A. No.

Q. You would not say it was not a fact?

A. I would not say it was not a fact.

(Testimony of Stephen Davidson Bechtel.)

Q. You would not say it was not a fact that the forms hadn't even been ordered at that time?

A. I wouldn't say that that was not a fact.

Mr. Tinning: If the Court please, we offer in evidence, as defendant's exhibit next in order, a letter from Six Companies of California, dated May 1, 1935, addressed to Wallace B. Boggs, District Engineer.

(The letter was marked "Defendant's Exhibit LL.")

Mr. Tinning: This letter is dated May 1, 1935, and reads:

DEFENDANT'S EXHIBIT LL

Builders of Low Level Broadway Tunnel
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

May 1, 1935.

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster St.,
Oakland, Calif.

Dear Sir:

We wish to confirm our statement of excavation we plan to perform this year.

In view of the fact that this job will run through the winter of 1935-36, we do not want

(Testimony of Stephen Davidson Bechtel.)

to undergo any expense of sloping slide areas or furnishing roadway excavation. If this work is done this year, it would probably need to be done again after it has stood a second winter.

We plan therefore to

1. Complete the roadway and finish it from Broadway to Golden Gate Avenue.
2. To rough out the slides and remaining roadway excavation on the remainder of the West approach.
3. Complete the backfill of the lower P. G. & E. wall, Sacramento Northern Bridge, Landsvale Viaduct, and any other structure that may be backfilled.
4. Complete the structure excavation.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA,

By (Signed) T. M. PRICE,
Project Manager.

P:C

[Endorsed]: Received May 2, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. LL. Filed April 26, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1090]

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: Q. Mr. Bechtel, just to get in mind what this letter covers,—the work that you planned to complete in the summer of 1935 was the grading of roadway from the westerly end of the project, or Keith Avenue to Golden Gate Avenue; that was actually finished at that time, so that there was travel across that to serve that part of Oakland, was there not?

A. If I remember correctly, I believe so.

Q. In the fall of 1935, you also, from a point along the highway portions of the project, roughed out the slopes that had come in during the winter and the remaining roadway excavation,—the remainder of the work up to the tunnel?

A. I think so.

Q. And you completed the building around the Pacific Gas & Electric—What I am pointing to now is a large substation of some kind,— [1091] an electrical power station of the Pacific Gas and Electric Company, in the bottom of the canyon; and you completed backfilling behind that wall some 30 or 35 feet in height, which was constructed with that roadway cut through the P. G. & E. property?

A. Yes.

Q. You also concluded the backfilling that was necessary around that structure and other structures that had been built along the road, and you completed—or planned to complete structural excavations for all the other structures on the project so that you would not have this difficulty that had occurred in the preceding year where work had to

(Testimony of Stephen Davidson Bechtel.)

be stopped because water got in the foundations of your structure before you got your concrete in? That work, incidentally, Mr. Bechtel, was all let on subcontracts, wasn't it? A. Practically all

Q. Were Six Companies doing any work outside of the tunnel itself in the season of 1935?

A. Well, apparently we installed a plant on the east end——

Q. Well, I guess we did not understand each other. You said "practically." I am not referring to the installation of plants or concrete equipment or other matters which were used in the construction of the tunnel. The plant that you installed to drive the drift from the east end, east portal, was part of your tunnel plant, wasn't it?

A. Yes.

Q. You were doing that work; and, of course, those plants were your own plants; but isn't it a fact that no part of the work outside of the tunnel work was done by Six Companies, and that all the rest of it was subcontracted to various subcontractors?

A. With this exception: we had subcontracted the grading work to McKinley and Crowell, at the completion of the main portion of the grading proper, and the other work that was under their contract, and they asked to be relieved of the completion of that work, because it was apparent that they could not proceed to complete same immediately; it would [1092] mean quite a gap in their opera-

(Testimony of Stephen Davidson Bechtel.)

tions; and we relieved them of that operation, and undertook to do it and use our own force.

Q. Referring again to Defendant's Exhibit "P,"—the perspective map,—all of the grading work that you refer to is the grading work—it is this possible 11,000 feet of highway from Broadway to Keith Avenue up to the west portal of the tunnel; that was done by subcontractors, wasn't it?

A. It was originally all to be done—That was what I am referring to—It was completed by Six Companies of California, later, with their own force.

Q. In other words, the winter of 1934-35 brought a delay in that work; the grading was done after that; you did it, yourself, with your own equipment—is that it?

A. Well, the water brought about delays in the work. They completed the work so far as they could at the time; the job could not be completed in a continuous fashion, and, therefore, we relieved them of responsibility of staying there to complete that.

Q. The reason they could not complete it was that your tunnel work was not far enough along; they had to have materials in the tunnel fill excavated from the tunnel?

A. Well, that was one of the reasons.

Q. Was there any other reason?

A. One reason was that, as outlined in one of the recent letters here, there were slides contemplated; and, if slides did take place in the ensuing

(Testimony of Stephen Davidson Bechtel.)

winter, it would have to be resloped afterwards, before being accepted by the Highway Department.

Q. In other words, you had a contract for this entire project, of one unit; and the requirement was that the contractor give the District the slopes in accordance with the plans and specifications at the end of the job?

A. That is the way you interpret it.

Q. Is there any other question about that in your mind?

A. Well, [1093] on the practice of it, yes; but not on the interpretation——

Q. Well, at any rate, that is what you had in mind at that time: that you would have to,—when you turned over your job, you could not turn it over with slides that had come down in the winter——

A. Well, that was not the point so much, as I understood the resloping; but I will say "Yes" to your point.

Q. That method of using subcontractors for the grading work and the construction of these various structures, and they are sometimes substantial, sometimes they are large, concrete structures—but those were all built by subcontractors, weren't they?

A. Well, substantially, yes.

Q. Well, were there any parts of those structures, other than the west portal down to Broadway, that were built by Six Companies, itself?

A. There were portions of it that were worked on by Six Companies.

(Testimony of Stephen Davidson Bechtel.)

Q. Name some of them.

A. Landvale Overhead Crossing was started by a subcontractor who found the conditions so tough he practically went broke.

Q. Did Six Companies do some work on there?

A. I think they did.

Q. But it was subcontracted?

A. The start was.

Q. Was all the work west of the portal of the tunnel subcontracted?

A. Originally contemplated to be.

Q. Well, was it? Did you let contracts for all parts of the work? A. Yes.

Q. Some of those contractors did not complete their work? A. That is correct.

Q. Now, the next diagram, in chronological order, is a letter from Six Companies of California to the District, which has already been introduced in evidence as Plaintiff's Exhibit No. 45,—the letter of June 10, 1935, requesting a 180 day extension of time. That is [1094] in evidence. And the next is Plaintiff's Exhibit No. 55,—letter of June 10, 1935, relative to engineering.

Then the next is a letter of July 12, 1935, Plaintiff's Exhibit No. 56, in which the District notifies Six Companies that its request for extension of time had been denied.

Q. Mr. Bechtel, when you received this letter—by "you," I refer to "Six Companies"—received that letter from the District, on or about July 12,

(Testimony of Stephen Davidson Bechtel.)

1935, notifying Six Companies that it had not received the extension of time; that the extension of time requested by your letter of the 10th of June had been denied, did Six Companies cease work?

A. It did not.

Q. It continued with the work? A. Yes.

Q. Did you ask, at that time, for any extra pay?

A. To the best of my knowledge, we did not.

Q. The next exhibit, in chronological order, is already in evidence,—Plaintiff's Exhibit No. 56, the letter of July 12, 1935, to Six Companies from the District, rejecting the claim of Six Companies for the performance of additional engineering by the District. Did Six Companies cease work at the time it received that letter?

A. What date was that?

Q. The letter denying the request for additional engineering,—July 12th. A. It did not.

Mr. Tinning: Your Honor, I don't know how much longer you care to go on tonight; I have lots of ammunition here, but we are going into another subject.

The Court: We will meet downstairs in Room 276 tomorrow morning, as there is some construction work to be done in this room for several days. We will take an adjournment until tomorrow at ten o'clock.

(Thereupon, an adjournment was taken until Wednesday, April 27, 1938, at 10 o'clock a. m., at Room 276.) [1095]

(Testimony of Stephen Davidson Bechtel.)

Wednesday, April 27, 1938.

STEPHEN DAVIDSON BECHTEL,

Cross Examination (Resumed).

The Court: Proceed, Gentlemen.

Mr. Tinning: Mr. Clerk, may I have Plaintiff's Exhibit No. 47 and Plaintiff's Exhibit No. 57?

Q. Mr. Bechtel, on last Friday Plaintiff's Exhibit No. 47 was introduced, a letter dated July 26, 1935, a letter signed by you, in which you, on behalf of the plaintiff in this action, stated in substance—I am going to hand you the exhibit, because it is rather a long document, and I think you will be able to follow this examination—in which you stated on behalf of the Six Companies that you thought the question of engineering should be submitted to arbitration, and in which you stated that if the arbitration was agreed to the conditions upon which it would be entered into, expenses, etc., and on the same day you also wrote a letter to the District, Plaintiff's Exhibit No. 47, in which you referred to the District's letter of June 12th, which is also in evidence, rejecting Six Companies' application for an extension of time.

Mr. Smith: July 12th instead of June 12th, Mr. Tinning.

Mr. Tinning: July 12th. The letter from the District was dated July 12th, and the application for extension of time of Six Companies to the District was dated June 10th.

(Testimony of Stephen Davidson Bechtel.)

Mr. Smith: That is right.

Mr. Tinning: These letters were both written on the same day. If you will look at the exhibit I think that is clear. That is correct, isn't it?

A. Yes.

Q. And one letter sought arbitration of the engineering contention that you were making, and the other letter respecting the extension of time stated that the delay that had occurred had been [1096] caused by the heavy rainfall of the last rainy season, which was much heavier than any season in recent years, and by the fact that the condition of the ground was such that faster progress was impossible, the actual ground conditions had been far worse for working purposes than the condition of the ground shown by the geological report made by the geologist of the District, and this had resulted in retarding the speed of the work. Now, this was the first time, was it not, Mr. Bechtel, that there was any written protest or objection, if this be an objection, or mention in writing of the geological report which you have testified misled Six Companies, this is the first time there was any written mention of that geological report in any communication of Six Companies to the District?

A. I believe that is correct.

Q. And this was fourteen months, approximately, after the contract? A. Yes.

Q. Each tunnel had been driven somewhere between 800 and 900 feet into the mountain at that time; that is true, isn't it?

(Testimony of Stephen Davidson Bechtel.)

A. Approximately.

Q. Now, in that same letter, in the letter sent the same day, rather, in which you were seeking arbitration, you also stated, if you will please refer to the last page of Plaintiff's Exhibit No. 57:

"In the event you are unwilling to submit the matter to arbitration we will expect to immediately commence such legal proceedings as will be necessary or proper to determine our rights in the matter. In order that a speedy settlement may be reached we ask that you reply to this letter by August 7, 1935. If we do not receive an affirmative answer by that date we will consider that you do not care to arbitrate the matter and commence such legal proceedings as may be proper, as above suggested."

Now, at the same time that you asked for arbitration, at the same [1097] time you protested and objected to the engineering decision, at the same time you objected to the extension of time, you stated if you did not have a reply from the District with respect to the arbitration by August 7th that you would commence legal proceedings. As a matter of fact, you received no reply from the District, that is true, isn't it?

A. I believe that is correct.

Q. Well, you know it, don't you?

A. Well, I believe it is so.

(Testimony of Stephen Davidson Bechtel.)

Q. You did not start any legal action, did you?

A. That is right.

Q. Well, that is correct? A. Yes.

Q. And you proceeded with the work from that time on for a considerable period? A. Yes.

Q. You stated in the letter respecting the extension of time that the rainfall during the winter of 1934-35 was unusually heavy, and much heavier than it had been for a number of years before. You remember that statement? A. Yes.

Q. As a matter of fact, don't you know that the rainfall in the season of 1934-35 was less than normal average rainfall until the month of April, 1935?

A. The average rainfall for that winter was considerably over the average in previous years.

Q. Isn't it a fact that the rainfall, the mean average rainfall at Berkeley, where there is a Government station, it is the nearest station to this work, is 25.12 inches, and that the total rainfall for the season of 1934-35, as shown by the records of the Berkeley station, was 25.24 inches?

A. I do not know that to be a fact. I can tell you that I personally reviewed, or had compiled, the rainfall for the winter period from October to April, inclusive, and that the period of time in 1934-35 was substantially over.

Q. How much over?

A. Approximately 50 per cent.

(Testimony of Stephen Davidson Bechtel.)

Q. 50 per cent. Did you examine, yourself, or under your instructions have examined the records of the United States Weather Bureau that are published showing rainfall measurements taken [1098] at Berkeley, at the University of California, the nearest Government station to this work?

A. On my instructions——

Q. Will you answer "Yes" or "No," please?

A. No, so far as the records in Berkeley that you refer to. On my instructions, and believing that it was the closest available Government statistics I had the data for the past previous years procured from the Department of Agriculture, from their proper subdivision that keeps the rainfall records officially.

Q. Well, what station?

A. Oakland, believing that that was the closest one to the job.

Q. Well, the Government station for rainfall probably was at Chabot, is it not?

A. I do not know.

Q. And they also keep rainfall records at the Oakland Airport?

A. If that was the case I did not know it.

Q. You did not know it?

A. My instructions were to get the data from the station that was nearest to the work, and it came back from Oakland.

Q. You will concede, will you not, that the University of California is closer to this work than downtown Oakland, is it not?

(Testimony of Stephen Davidson Bechtel.)

A. I would say probably—I would say approximately the same distance.

Q. All right. Would you say that it is not a fact, as shown by the records of the United States Weather Bureau, that up to April 1, 1935, the rainfall records at Berkeley station show that the rainfall was less than the mean average rainfall?

A. The only records—

Q. Will you please answer "Yes" or "No," and then explain? A. I cannot answer that.

Q. You do not know that. You do not know that there was over 5 inches of rain in the month of April, 1935?

A. I do not know that. [1099].

Q. That is what brought the average above the mean average rainfall?

A. That is not correct.

Q. That is not correct?

A. To my best belief based upon the investigation that I had made.

Q. You continued to work through the month of August after delivering the ultimatum of July 26, 1935, which we have already referred to, and in which you said that unless there was arbitration that you were going to take legal action, you continued to work, and on August 23, 1935, you wrote a letter to the District—Mr. Clerk, may we have Plaintiff's Exhibit No. 48 in evidence—you wrote a letter in which you stated that,

(Testimony of Stephen Davidson Bechtel.)

“At the present time we are engaged in installation of the type ‘A’ concrete tunnel section, and while we will continue to proceed with the installation of same in the excavated portions of the two tunnels, we hereby notify you that we are informed and advised by our engineers that the section in question is inadequate and unsafe.”

That is the first paragraph of the letter signed by you bearing date August 23, 1935. You were referring in that paragraph, were you not, to the permanent concrete lining which the plans and specifications called for, you were to install under your contract a lining which was required to be of the minimum thickness of 2 feet at the top or crown of the tunnels, and 5 feet at the base, that is what you were referring to?

A. The permanent lining.

Q. Yes. You were not referring at that time to the timbers with which you were supporting the excavated and unlined portions of the tunnels?

A. No, but in that connection I think it is pertinent to recall that there had been a number of discussions between our engineers and your district engineer, Mr. Boggs, and that Mr. Boggs had had advice from our men as to their intention, their thoughts, their views on this subject, and also at that time that [1100] we had protested to Mr. Boggs and to the District Engineers on the job

(Testimony of Stephen Davidson Bechtel.)

that the methods which were necessary in the setting back of timbers and in the trimming of timbers were contrary to the practice, and was probably unsafe, and was very difficult, was delaying the work, and I believe that that fact was reviewed at some length by our consultants who reviewed the matter with Mr. Boggs in his office.

Q. Now, you made an explanation and you have stated that engineers employed by the contractor had protested in some conference with Mr. Boggs. There was no written protest of any kind or character to the District prior to this letter of August 23, 1935, was there?

A. I believe you are right. I will answer you "Yes", and I might further comment on that point that up to this time, Mr. Tinning, we had been building a tunnel, we thought we were building it for people who wanted a tunnel built and where it would be handled as a construction project, and as the difficulties developed we were being driven to a point by lack of decisions, by the control which was being exercised over your engineers by your Board of Directors, and by your legal counsel, where it was making it very difficult to make progress; it was interfering with our progress, it was interfering with the decisions, it was making the whole project very confused and difficult.

Q. Mr. Bechtel, let us take up one subject at a time. Let us take up the engineers that you referred to, and I assume you referred to the engineers

(Testimony of Stephen Davidson Bechtel.)

mentioned in the next paragraph of this letter, T. L. Phillips and Fred H. Tibbetts; is that correct?

A. Yes, and I believe Mr. Tom Price had also discussed it at some length with Mr. Boggs as a job matter.

Q. Isn't it a fact that the first time that these men whom you had had brought in, Mr. Phillips and Mr. Tibbetts, ever discussed [1101] the matter with Mr. Boggs was on the 8th day of August, 1935? A. I don't know the date.

Q. You don't know? A. No.

Q. When did you employ Mr. Tibbetts and Mr. Phillips? A. I do not recall the date.

Q. It was very shortly before this letter was written, wasn't it?

A. I am under the impression that it was possibly six weeks, Mr. Tinning.

Q. If it was six weeks that would be the outside, and your memory is not clear?

A. My memory is not clear.

Q. You have not examined the records?

A. I have not examined the records.

Q. Then previous to the time—put it six weeks, that would be six weeks back of August 23rd, or about the 10th of July, 1935, you never made any protest of any kind with respect to the design of the tunnel or of the conditions which you had encountered there? A. No, that is not correct.

Q. When did you first protest?

A. The discussion I had with Mr. Boggs, as I told you, or told the Court last Friday.

(Testimony of Stephen Davidson Bechtel.)

Q. Well, that was sometime in April or May?

A. Yes.

Q. You claim that at that time you protested regarding the ground conditions? A. Yes.

Q. Did you protest regarding the tunnel lining?

A. I do not recall.

Q. So the first time you ever protested the tunnel lining was August 23, 1935?

A. You mean in writing?

Q. Yes. A. I believe that you are right.

Q. And the first time you ever protested the tunnel lining, verbally or in any other way, was after Mr. Tibbetts and Mr. Phillips had been employed as consulting engineers by the Six Companies? A. I think you are right. [1102]

Q. Well, that is correct, isn't it? As a matter of fact, isn't it true that Mr. Tibbetts was on the job and inspected the tunnels for the first time early in August, 1935?

A. I don't know the date.

Q. And on the 8th day of August he called on Mr. Boggs and stated to Mr. Boggs, with Mr. Phillips, that the contractor was having difficulty, and that the permanent lining of the tunnel was not adequate, and as a matter of public benefaction Six Companies desired to have the lining thickened?

Mr. Marrin: I think that is improper cross-examination. It is a conversation at which this witness was not present.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: He was president of the company and sent the men there.

Mr. Marrin: He doesn't know what occurred at any conversation that occurred in his absence.

The Court: Ask him if he knows.

Mr. Tinning: Q. Do you know what occurred at that conference?

A. No, but I might comment that I understood that they discussed matters which were subsequently covered in these letters.

Q. Well, as a matter of fact, isn't it true that Mr. Tibbetts and Mr. Phillips reported to you that on the 8th of August, 1935, they had inspected the tunnels and that in their opinion it would be advisable, from the contractor's viewpoint, to thicken the lining? A. I believe they did.

Q. Isn't it a fact that you were one of the members of this executive committee that you told us about yesterday, that all matters of policy and general consideration of the work was referred to?

A. Yes.

Q. You knew when Mr. Phillips and Mr. Tibbetts were employed. Isn't it true shortly after they were employed they came back and told you from the standpoint of the contractor it was advisable [1103] to thicken the lining of the tunnel?

A. Yes, the matter was undoubtedly discussed with Mr. Lawler and with me. The details of the particular conversation and just when it was I do not recall. [1104]

(Testimony of Stephen Davidson Bechtel.)

Q. Now, this suggestion that the lining be thickened came in August, and shortly prior to the date of this letter, and you state that you were advised, you state in the letter that you have before you of August 23, that you were advised on August 19 by Mr. Tibbetts and Mr. Phillips that they thought the installation of the type "A" section endangered the structural safety of the work, the safe operations of ourselves as contractors, and the future safety of the public. They recommend that same be enlarged and strengthened and further reinforced in order to make same an adequate and safe installation suited to the nature of the ground conditions which have been encountered, and for the uses to which the tunnel will be put after completion.

You were discussing then the permanent lining and nothing else?

A. We were discussing the lining, and you say nothing else—I don't know as that would be a proper word.

Q. You were not discussing your timbering, were you, you were discussing the installation of the Type "A" section?

A. This letter refers to the lining.

Q. And you at that time were asking the District Engineer to consider thickening the lining, so that after the tunnel was done it would be safe for the public to pass through. That was one of the elements.

(Testimony of Stephen Davidson Bechtel.)

A. This letter, these discussions and investigations had been made by those men at our instigation; they discussed it with Mr. Boggs, I was not present at those discussions, but this letter was subsequently written to the District Engineer, so that they would have our views in writing.

Q. You signed the letter, didn't you?

A. I presume that I did. I see it is not a signed copy.

Q. You remember writing the letter, don't you?

A. Maybe we can check that letter by looking at the original. [1105]

Q. Is there any question? Don't you remember this letter on this important matter of August 23, 1935, and the contents of the letter?

A. I remember the letter.

Q. There is no question that you signed the letters which is in evidence here?

A. It may be, but as I explained yesterday, there had been several letters sent to you that I was familiar with that I had authorized others to sign my name to.

Q. When you put this letter in evidence last Friday, it was stated it was signed by you.

A. That is conclusive, then.

Q. So that that matter goes out of the question. At this time, one of the matters discussed in your letter was the feature of safety of this tunnel design, and you desired to have it thickened so that the public would be protected and the tunnel would

(Testimony of Stephen Davidson Bechtel.)

not fall down after it was built. That is true, is it not?

A. That was probably one of the reasons.

Q. Didn't the letter say so, in order to make the same an adequate and safe installation suited to the nature of the ground conditions which have been encountered and for the uses to which the tunnel will be put after completion. That is true, is it not, that is what the letter says, and that is what you are referring to, the safety of the public?

A. In that respect, yes.

Q. You also had in mind that under this contract you were required to furnish a completed project to the District. You knew that?

A. That is right.

Q. And if the tunnel lining was inadequate to support the ground after you installed it and before the job was completed, that the contractor might have a liability? You knew that?

A. I presume that I did. However, Mr. Tinning, I think that on that point, it is my understanding that we contracted to build a particular job which was described in the plans and specifications [1106] and the attachments thereto and the references thereto.

Q. Referring now to the geological report?

A. I am referring to the plans and specifications and the contract, and all of the references therein, and if that was a different job, it should be so recognized that the concreting was different, you

(Testimony of Stephen Davidson Bechtel.)
should change your structure, and in that regard you will notice there is a certain pride among men in the construction business to have whatever we do succeed. These firms had combined themselves together and these Six Companies of California had quite a long record of construction. Many of us live around here, we had our homes here, and when we went out there to build a job we wanted to build something that was right; if anything was not right we wanted to call your attention to it for several reasons, one of which was that we lived here and we wanted this thing to be a properly constructed job.

Q. Mr. Bechtel, at the time this letter was written, approximately 1,000 feet of tunnel had been excavated in each of the bores, of which approximately 800 feet in each tunnel had been standing supported on timbers for many months; that is true, is it not? A. That is correct.

Q. And nothing had been done with respect to the actual work of installing permanent concrete lining in these tunnels until after July 1, 1935?

A. No, you are wrong there.

Q. What concreting had been done other than putting in the 92 feet in the south bore, and 110 feet in the north bore, which was completed in November, or early in December, I think the 5th of December, 1934—what concrete was placed in the tunnel after that date and when was the first time that it was placed?

(Testimony of Stephen Davidson Bechtel.)

A. You have a compound question, Mr. Tinning, there. You ask whether anything had been done. To that I would say you apparently fail to realize that in order to get ready to concrete a tunnel [1107] of this type and size there was a lot of preparatory work necessary, particularly where you require the type of work that you want here, which substantially amounted to steel form, and the intricacy or the detail and the exactness to which it had been indicated would be required, we had to be very carefully prepared to do that properly, very carefully and very exactly; and plans had been submitted to Mr. Boggs and, as I understand, they were slow in being returned, there were suggestions, inquiries into certain points, has this been considered, has that been considered, has something else been considered—those matters were considered, and we were getting together our plant and equipment for that operation.

Q. What had been done in the actual placing of concrete in the tunnel prior to July 1, 1935?

A. The portal sections had been completely concreted.

Q. Was any concrete poured in the tunnel after December 5, 1934 and prior to July 1, 1935?

A. I do not believe any had been. However, the records will show that, Mr. Tinning.

Q. Isn't it a fact that there was not any poured?

A. I do not believe so—I believe it is a fact that

(Testimony of Stephen Davidson Bechtel.)

there was none. - However, I have not the records to know.

Q. Isn't it the fact that during the month of June, 1935, you were assembling the forms, the steel forms, and the jumbos on the job, that you were constructing and finishing the construction of a concrete aggregate plant, that you were building a concrete bunker, a gravel bunker, a cement bunker, down on the railroad at the Landvale connection, and that you were not ready to pour any concrete prior to the 1st day of July, 1935?

A. I believe that is correct.

Q. And during all of that time as you drove forward in the tunnel you advanced without placing any lining under those timbers? [1108]

A. You mean not concreting?

Q. Yes. A. I think that is correct.

Q. Isn't it true that sometime in the latter part of May you discovered that the timbers had settled in various places into the sections required for placing the concrete lining?

A. The particular date I do not recall, but prior to the time we started to concrete that had been apparent.

Q. Wasn't it about the time that you were talking to Mr. Boggs this conversation that you said you had with Mr. Boggs in April or May, that you knew that you had a considerable amount of timber which had settled or moved so that it was inside

(Testimony of Stephen Davidson Bechtel.)

of the sections or the area where you must place your concrete?

A. I do not have a recollection of that knowledge at that time.

Q. When did you first learn that?

A. I believe that it was—

Q. Approximately.

A. I believe that it was at the time we were getting ready to set up the concrete forms in the tunnel, and approximately the same time, too, that Mr. Phillips and Mr. Tibbetts were employed, and, incidentally, they were employed after your letter to us of approximately June 12, turning down our application for an extension of time.

Q. Just so the record will be clear, that is July 12?

A. July 12.

Q. So that we have now in your recollection Mr. Phillips and Mr. Tibbetts were employed sometime after July 12?

A. Sometime in there.

Q. And you think it was about that time that you discovered that the timbers, a large number of the timbers were extending into the concrete section?

A. I think so.

Q. So that that timber had been in, some of it, some of the timber that was placed in January had been in six months at that time, or more?

A. Yes. [1109]

(Testimony of Stephen Davidson Bechtel.)

Q. And the timber that had been placed in December had been in seven months or more at that time?

A. If it was placed in December it would have been in seven months.

Q. Now, isn't it true that when you discovered this you knew that you would have a difficult and hazardous task to reset the timbers, that is, move them back, so that you could have the place to put in the specified concrete lining? A yes.

Q. You also knew at that time that it would require a considerable amount of concrete to fill the space between the timbers? A. Yes.

Q. You also knew at that time that the District Engineer would require you to build the tunnel in accordance with the plans and specifications, and not permit timbers to intrude into the section required for the concrete lining under the plans and specifications?

A. As this matter was developed, and it became apparent—

Q. Will you answer "Yes" or "No," and then explain? Did you know that the engineer was going to require you to build this tunnel the way it was specified?

A. Yes, exactly the way it was specified.

Q. He was not going to permit the timbers to intrude into the concrete section, you knew that, too? Will you answer that "Yes" or "No"?

A. No.

(Testimony of Stephen Davidson Bechtel.)

Q. You did not know that?

A. No, because I will tell you the reason why, because there was a discussion, as I understand it, between Mr. Price, as reported to me by Mr. Price, that at first a quarter of an inch intrusion would be permissible, a ridiculously small amount in a tunnel of this type and character, then it was increased to half an inch, and then to an inch, and the discussions went on there, we were endeavoring to get a practical application to take care of a very difficult situation, and basing our suggestion and our requests on a lot of experience that Mr. [1110] Lawler had had, 30 or 35 years in tunnels up and down this western country, and they had never had a condition as unnecessarily stringent as this was. We were endeavoring to get a practical application and none was given. As I say, we considered your quarter of an inch tolerance, later half an inch, and then an inch, ridiculous. We were endeavoring to get a practical application. We called in Mr. Tibbetts, we called in Mr. Phillips, who were engineers, who had done a lot of work, and in so doing had interpreted for the owner as engineers in their professional positions, interpretations of what is practical, and when specifications are made we, as contractors, think that they are going to be interpreted practically, not with a definite legally interpreted application. There is a great difference between building a tunnel under a technical legal interpretation and under a practical engineering in-

(Testimony of Stephen Davidson Bechtel.)
terpretation, and I just want to comment, if all tunnel construction or construction has to be done under a very technical legal construction, it requires a vastly different condition to work under than is common and accepted practice.

Q. Mr. Bechtel, before you bid on this job you read the specifications, didn't you? A. Yes.

Q. And you remember the section with respect to timbering, overbreak, which required you, which said in no event is the timber that is installed to be permitted to extend into the section required for the concrete lining, a 2-foot neat section at the top and 5 feet at the bottom? Do you remember that?

A. Substantially, yes.

Q. When did this conversation with respect to permitting the timber to intrude, or what you call tolerance, that, as you say, Mr. Price had, first a quarter of an inch, and then half an inch, and then an inch, in what month did that occur?

A. When we were [1111] getting ready to start concreting, when it became apparent that the timbers had settled to a point that there was a substantial—

Q. (Interrupting) You said that was about the 1st of July, as I remember it.

A. Somewhere around there.

Q. As a matter of fact, it was ultimately determined in this tunnel that it was necessary because the timbers had intruded to modify the sections to the extent of 10 inches, was it not?

A. That is correct.

(Testimony of Stephen Davidson Beehtel.)

Q. But at the time referred to, prior to the disaster of August 28, 1935, the District Engineer had advised Mr. Price that it would be necessary for him to set back the timbers so that he could build the section the way the plans and specifications called for, had he not?

A. With extreme exactness, and in my opinion unnecessary exactness, and contrary to practice, and contrary to what reasonable engineering would require.

Q. You think it was reasonable engineering to permit the timbers to intrude into the concrete in violation of the specifications?

A. It is accepted practice, Mr. Tinning; it is a question of degree.

Q. Isn't it a fact that at this time in July you were seeking to permit the timbers to intrude into the section, which would cut down the amount of concrete in the arch? You can answer that "Yes" or "No," and then explain.

A. Yes. A request was made, and it was pointed out, and I believe particularly by Mr. Tibbetts and Mr. Phillips, that there was considerable additional concrete between the timbers that would more than compensate for an encroachment of the timber, and particularly in this case, where the removal of these timbers would cause a real hazard, would slow down the progress, would interfere with the progress of

(Testimony of Stephen Davidson Bechtel.)

the work, and would cost a great deal of additional money. [1112]

Q. Mr. Bechtel, there is nothing in this letter about intrusion that we are talking about. I would like you to answer my question. I do not think you understood it. I was referring to these requests that you say were made verbally of Mr. Boggs and denied by him to permit timbers to intrude into the designed concrete lining section, and I asked you if it was not true that that would weaken the arch to the extent of the intrusion? A. No.

Q. It would not? A. No.

Q. That is your engineering opinion.

A. No

Q. Is that your engineering opinion? Will you answer that question? Is that your engineering opinion that the intrusion of the timbers into the designed section would not weaken the arch? Will you answer "Yes" or "No," please and then explain?

A. No; under the conditions that this job had to be built and was built, there was considerable additional concrete outside of the so termed minimum section which more than compensated for the intrusion of timber in the minimum section described.

Q. They had to put that in, anyway, to fill up the space between the timbers?

A. Not necessarily, no.

Q. What would you put in there?

(Testimony of Stephen Davidson Bechtel.)

A. One could have back-filled it, back-packed it with timber, with rubble, with gravel, as was done elsewhere in the tunnel.

Q. Between the timbers, back-packed with rubble?

A. Yes, the specification permitted that.

Q. It did? A. Yes.

Q. That is your opinion?

A. That is my recollection.

Q. You were trying to have the timber intrude into the section in the latter part of June and in August you wrote a letter in which you stated you thought that the section was weak and that it ought to be thickened, and that the public would suffer because it might fall down on them if you did not make it thicker? How [1113] do you reconcile those two positions?

A. Mr. Tinning, you are putting a wrong construction on this matter, and you are reading into it things that are not there. You are confusing the issue, I think, Mr. Tinning.

Q. I will have to take the responsibility for that, Mr. Bechtel. I would ask you, though, if it is not a fact in your letter of August 23rd you were seeking to have the district strengthen the arch by thickening it and make some other changes which would require the placing of more concrete and more steel in the arch than the A section which was called for in the specifications provided for? That is what this letter was seeking to do, was it not?

(Testimony of Stephen Davidson Bechtel.)

A. This letter was written August 23rd; this letter was written after our engineers had made a careful study of this matter.

Q. Will you answer my question, please? I ask you if it is not a fact that by this letter of August 23, 1935, Six Companies were seeking to have the district thicken the arch and add steel, and strengthen the permanent concrete lining?

A. Yes, but this letter was written at a subsequent date. The discussions which I spoke of were made in an effort to expedite this work, and make it safer, and make it more economical, and this came as a result of an engineering study made by Mr. Tibbitts and Mr. Phillips.

Q. Which would have resulted if they had adopted your suggestion in the addition of concrete to the arch, additional steel, and a new design, that is, a strengthened arch—that is what you were seeking, so that it would not fall down on the traveling public: isn't that the purport of this letter?

A. Well, you have got about five questions in one, there.

Q. Then we will break them up into one, if you cannot understand that one. Were you trying to increase the thickness of the de- [1114] signed section?

A. On the recommendation of our consulting engineers, Mr. Phillips and Mr. Tibbitts.

Q. Were you trying to strengthen the design of the section, Type A? A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. And in July or the latter part of June you had been delayed by the intrusion of timber, and now you state at this time on August 23, 1935, that "Under these circumstances"—that is, that the design was weakened, that it was likely to fall in or cause damage, that you would proceed with the installation of type A section of concrete under protest and upon notice to you as above stated; and we further hereby notify you that we do not assume any liability or responsibility for the safety or adequacy of any such installation, but, on the other hand, we will proceed with such installation only upon the condition that full liability of any kind, civil or criminal, which may arise from or be caused by installation of same be assumed by you. That is true, is it not? A. Apparently.

Q. Apparently. You wrote it, didn't you, and you told us in that letter that you would proceed under protest, and if it fell or anything of that kind we would be responsible and not you. That is true, is it not? A. Yes.

Q. And your contract stated that you took all risks in constructing that tunnel and delivering it as a complete job to the district.

A. That is what it said, the tunnel as originally contemplated and specified.

Q. And we were talking about the tunnel originally contemplated in this latter, section A lining.

A. That is correct, but when you talk about our assuming responsibility under our contract, if we

(Testimony of Stephen Davidson Bechtel.)

were to build something contrary to our contract we did not want to be held responsible for it.

Q. But your contract provided that you were to build A section 2 feet at the top and 5 feet at the haunch?

A. To meet certain condi- [1115] tions, yes.

Q. That was your contract, and you now say that you would proceed under your contract, but that you disclaim any liability; that is true?

A. That is true, Mr. Tinning.

Q. You wanted another lining than the one that was called for in the contract?

A. I was speaking here——

Q. Will you answer that question "Yes" or "No,"——

Mr. Marrin: Let the witness answer the question. He is doing his best to answer the question.

Mr. Tinning: Q. Will you answer my question and then explain? Will you read the question?

(Question repeated by the reporter.)

A. I recommended another lining.

Q. That is what you said in this letter?

A. We recommended another lining to take care of the different conditions that had developed, that had become apparent to us, following the recommendation of our engineers.

Q. Under your contract, in addition to the type A section there was a provision for a type B section, an invert, which was in effect a circle, a barrel, which you agreed to do, that work, the B section, at

(Testimony of Stephen Davidson Bechtel.)

a different and higher price than the A section. That is true, is it not? A. Correct.

Q. And under the terms of your contract the District Engineer had the right to have that Type B section installed in any place in this tunnel where, in his judgment, it was necessary to meet the conditions encountered, heavy ground or other conditions, that appeared in his judgment that required it?

A. That is true, but—

Q. Just a moment.

A. I want to explain my answer there. I say yes, my answer is that he had that right. However, if it varied substantially from the quantity involved, say instead of saying 200 feet there were 4,000 feet of type B, it would not have been the same [1116] contract, nor what was contemplated.

Q. In other words, you interpreted the plans and specifications so that the District Engineer was limited as to what he wanted to put in?

A. That is my understanding of the interpretation which has been placed on that in other cases, or in other instances where radical quantity variances have existed.

Q. Regardless of that—

A. (Interrupting): And that has been our experience, Mr. Tinning.

Q. That has been your experience? A. Yes.

Q. Mr. Bechtel, if the specifications show as a matter of fact that the District Engineer could have placed the whole approximately 6,000 feet of these

(Testimony of Stephen Davidson Bechtel.)

tunnels under the B section, you would not say that you were not bound to do it under your contract, would you? You would be paid for it under the contract price you bid, would you not?

A. I don't know, Mr. Tinning. I think that would be a very moot question whether you would. That is a legal question that I would probably have referred to our counsel for advice.

Q. You would have been paid more for that, you knew, if you did more?

A.* That is correct, and if a practical amount of it, not taking the entire project.

Q. We are only asking for your opinion of what you did. A. You did ask my opinion.

Q. You did not put any in, did you?

A. Not as such.

Q. You did not put any in, at all, did you?

A. Of Type B, as such?

Q. Yes. A. No.

Q. You did not put any in at all, one foot of it, did you? A. Of Type B?

Q. Yes. A. Technically speaking, no.

Q. You put in Type A and nothing else?

A. No, we put in Type A, but we put in a great deal more than type A.

Q. Referring now to the material that you put in outside of the [1117] neat section required by the plans and specifications?

A. Partially, yes, but I believe that point will be developed a little later by other witnesses who are in a better position to discuss that point than I.

(Testimony of Stephen Davidson Bechtel.)

Q. What are you referring to? There is no mystery about this. You had to put in a section, Mr. Bechtel, which was two feet thick at the top and five feet at the bottom, and you had to fill in the over-break, and you had to place concrete or grouting or rubble or lagging outside, according to the specifications, and one foot had to be solid concrete. You knew that under the specifications, didn't you, the over-break?

A. No, I do not recall that.

Q. And concrete between timbers?

A. I do not recall that.

Q. You do not recall that? A. No.

Q. At any rate, under your contract, you had to build this tunnel in accordance with the design with two feet thickness at the top and five feet at the bottom, and you were complaining as it developed in these letters that you had to put in a lot of extra concrete. Are you familiar with the provisions of paragraph (b) of Section 32 of the specifications?

A. I was familiar with them, but I am not familiar with them at this time.

Q. Let me refresh your recollection in view of this testimony: "Any excavation which, due to requirements of timbering"—

Mr. Smith: What page is that?

Mr. Tinning: It is page 59. It is the paragraph in the right-hand column, the second paragraph of paragraph (b), over-break, Section 32 of the plans and specifications which are in evidence:

(Testimony of Stephen Davidson Bechtel.)

"Any excavation which, due to requirements of timbering or the nature of the material, or caused by over-breakage, extends more than one foot from the outside neat lines of the concrete structure, may, at the option of the contractor, in lieu of replacing with the structural concrete specified, be filled to within [1118] one foot of said neat lines of concrete with spalls, boulders, or other material approved by the District Engineer and grouted in with a cement grout consisting of one part of cement to three parts of fine aggregate and applied as directed by the District Engineer and to his satisfaction. Such construction, however, shall not be permitted within the one-foot space outside of the neat lines of the concrete structure, and such space shall be filled only with Portland cement concrete mixed in the same proportion and placed at the same time as the structural concrete, provided that if steel liner plates or ribs are used and are allowed by the District Engineer to remain in place, the spaces back of plates and ribs shall be dry packed and grouted as provided, but any space between the plates and the neat lines of the structure shall be filled with concrete at the same time as the neat structure."

Did you have that provision of the specification in mind a few moments ago when you said you were doing more than your contract provided in filling in spaces between the neat concrete sections

(Testimony of Stephen Davidson Bechtel.)

and the spaces outside of the excavation? You knew you had to fill it one foot in concrete, under these specifications, didn't you?

A. No, I don't think it says that, Mr. Tinning.

Q. We will go on with the letter of August 23. I am referring to page 2:

"In view of our conclusion above expressed, we shall feel free to discontinue the further installation of this type section unless within reasonable time after receipt of this notification to you, you alter the design of the section to meet the objections thereto, or notify us in writing that you assume all responsibility and liability of any kind or character, civil or criminal, which may arise from the installation of same."

This was your letter of August 23rd, and it contains an ultimatum [1119] unless we change the design, the District changes the design, that you will cease work or that we must write you as a condition of going on that we assume full responsibility, civil and criminal; it is true you made that statement in that letter, didn't you?

A. That is what it says.

Q. "We are not now excavating in the headings of the tunnels on either the easterly or westerly end thereof; and we do not believe it wise to resume excavation therein until such time as you advise us whether or not you propose to alter or modify type A tunnel construction, as in the event a change is made in same,

(Testimony of Stephen Davidson Bechtel.)

the excavation can be made to conform to such altered design."

Now, Mr. Bechtel, giving consideration to that paragraph, you had approximately at this time, say 900 feet, somewhere in the neighborhood of that, of excavated tunnel supported on timbers in each of the bores which had been excavated, Type A section, which had been excavated under the method that you adopted to drive these tunnels, you say you had stopped work at this time for the purpose of seeing whether the district would permit you to install some other design, thicker design, heavier, stronger design; what did you propose to do with the 800 or 900 feet of tunnel which was timbered and designed to take the A section and which at that time you knew, in which area you knew the specifications required you to put in your A section—what did you propose to do with that 800 feet of tunnel?

A. That was a subject for a conference between our consulting engineers and the District's engineer. [1120]

Q. What did you intend to do?

A. I was not present at the conference; we referred that to men who knew more about designing than we did.

Q. You wrote this letter; you must have known what you intended to do?

A. No; I do not recall.

Q. You do not recall?

A. No.

(Testimony of Stephen Davidson Bechtel.)

Q. You do not know what you were going to do with 1800 feet of tunnel, or thereabouts, in which there was just these concrete rings and a little work which was started in July,—I think Mr. Larson said about two or three hundred feet in the two tunnels; you were going to have to—if you made those tunnel linings thicker, you were going to have to move all that timber back, reset it, or else make a smaller tunnel?

I do not recall that, Mr. Tinning; but I do presume that there would be other ways of accomplishing the same situation, by substantially increasing the quantities of reinforcing steel, putting in a slab in place of an invert, increasing the thickness of the slab, or increasing the member at the lower portion of the ventilating chamber in thickness, and reinforcing that with reinforcing steel or structural steel, so that you would have the same—you could accomplish practically any designing in that manner—I am presuming, now, you understand; but, as I say, that was a matter for engineering study, which had been made by Messrs. Tibbitts and Phillips, who in turn discussed it with your Mr. Boggs.

Q. Were you planning, at this time, Mr. Bechtel, to have the tunnel take the shape of a vermiform appendix, with one part of it at one size, and then a bigger, thicker tunnel in the other part—

A. I don't know some of the words you are using.

Q. Well, I am sorry. I thought, from this letter, you might understand it. You were planning, were

(Testimony of Stephen Davidson Bechtel.)

you not, to make the tunnel [1121] smaller in this portion where the timbers were?

A. I was not planning anything; we had some consulting engineers whom we had confidence in, and we subsequently discussed it with Mr. Boggs, and also, I believe, we discussed it with the Department of Public Works, with the PWA men in the Bureau of Public Roads; but, in direct answer to your question, I do not think it was contemplated to make any substantial change in the shape or thickness or clearances of those tunnels; and, further, from my understanding, my recollection, that it could be accomplished without affecting those matters seriously at all.

Q. At the time you were seeking to have the District modify the design of this "A" section, because you said the ground conditions were bad, you also thought the District could not require you to install the "B" section which was designed for extremely heavy ground?

A. If I said they could not require us to do it, the words did not truly reflect my thought. I think they could ask us or require us to do so; but it would change the basis of compensation to us, because it would then be a different job than we contemplated, which would entitle us to an extension of time and to an equitable, reasonable, fair price, as determined by the proper parties.

Q. Are you talking now about "B" section, or are you talking about this modified section that you

(Testimony of Stephen Davidson Bechtel.)

were hoping to get, under your letter of August 23rd?

A. I thought I was talking about the subject you asked for, namely, "B" section.

Q. You are testifying now, as president of Six Companies at this time you assumed if the District ordered you to place "B" section in these tunnels in accordance with your bid at the bid price, that it would be a modification of the contract, and that you would be entitled to a change in compensation and would be entitled to equitable relief?

A. If it was a substantial change. [1122]

Q. What do you mean by "substantial"? I am talking about "B" section just as it stood in the specifications.

A. You refer to going from 200 feet to 6000 feet, or 5820 feet. If you did that, I would personally be of the opinion it would be a change in the contract and as a matter of law—Well, you know better about that than I.

The Court: We will take a recess.

(Recess)

Mr. Tinning: Q. Mr. Bechtel, if I understood you with respect to the "B" section, in your previous testimony, you considered at the time you wrote this letter of August 23rd, that the District Engineer could not order the "B" section placed in the tunnel to any substantial extent beyond 200 feet, the quantity that was set up in the bid sheet as an

(Testimony of Stephen Davidson Bechtel.)

estimate on the quantity for bidding purposes; is that a fair statement?

A. No. I think he could order the entire section put in; but, if he did order the entire tunnel put in, in Section "B", if he substantially varied from the quantity indicated there, then a proper adjustment, a proper determination, should be made in that. Now, let me elaborate just on that——

Q. Well, before you do, may I ask one thing? You say "a proper adjustment." That is, you would be paid more money than your bid price; is that what you mean—on the "B" section?

A. If that is indicated that that was the proper thing to do.

Q. Well, I am asking about the contract provision.

A. Well, I don't know it as a matter of contract. Any contract is subject to interpretation of law, I presume. I believe, while I am not an attorney—but the experience that I have had in years gone by—I think if there is a substantial variance in quantities—I am not talking of a 5 or 10 or 20 per cent variance—but, if you [1123] get a substantial variance, then an equitable adjustment of the contract should be made for that, if it substantially increases the cost of the job, because of it. At no time, did we endeavor, or want to, or refuse to construct this job in accordance with the wishes of Mr. Boggs. It was not our desire to say we would not build any number of lineal feet of Section "B";

(Testimony of Stephen Davidson Bechtel.)

but, when you speak of the amount we could be required to, under the contract, I think we were required to put it in, but the compensation would be a subject that would be another matter.

Q. In other words, after your explanation, you believe that, if you had been required to put in 1000 feet of Section "B," that you would have been entitled to receive from the District something more than the price per foot for "B" section that you bid and which was written into the contract?

A. That cannot be answered "Yes" or "No"; I don't know whether 1000 feet is "substantial"; it may or may not be; and, if it increased the cost, then we would probably be entitled to that; but that is a legal question.

Q. Well, if it all had been ordered in, the entire 6000 feet of tunnel in "B" section, do you think that that would have entitled you,—the Six Companies would have been entitled to any more money than the price that you bid on "B" section and signed a contract to construct it for?

A. I cannot answer that "Yes" or "No"; it depends upon the conditions; it depends upon the cost.

Q. In other words, you would not be bound by your bid if it cost more than the bid?

A. My understanding is that we would be entitled to a proper accounting and proper adjustment for the increased quantities beyond a reasonable portion. That is a legal question. I am

(Testimony of Stephen Davidson Bechtel.)

just a contractor. You know all the answers to these things .

Q. Thank you, Mr. Bechtel. You think, if it cost more than the [1124] bid price, you would be entitled to compensation. Did you also consider, when you were giving thought to the problem, that, if it cost you less than the bid price per foot for "B" section, you would give something back to the District?

A. I don't know as I gave it any consideration.

Q. You did not think about that?

A. Your point here is not that question; it is if we considered, in writing the letter; but the bid was another point.

The Court: Don't occupy any time upon the basis of giving anything back.

Mr. Tinning: Well, I didn't want to be misled, your Honor.

Q. Mr. Bechtel, I would like to refer you and read to you, in view of your testimony about "B" section, paragraph "B" of Section 1 of the specifications, which appears on page one:

"Estimates of Quantities. Where estimates of quantities are given on the Proposal Form, or in 'Notice to Contractors,' or in any contract executed hereunder, it is hereby declared and shall be understood that such quantities are approximate only, being given as a basis for comparison of bids. The District does not expressly or by implication agree or guarantee

(Testimony of Stephen Davidson Bechtel.)

that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work as may be deemed necessary or expedient by the District Engineer."

You had that in mind,—that provision,—when you bid, didn't you? A. Probably did.

Q. Well, you did, didn't you; you read the specifications? A. We read the specifications.

Q. With respect to the liability of the contractor, in your letter of August 23rd you said, if you proceed, the District will be civilly or criminally liable for any of the difficulties you had. [1135] I will refer to Paragraph "K" of Section 6 of the Specifications, which appears on page 6:

"Contractor's Liability: On all work the Contractor is to assume all liability of every kind or nature, arising from said work, either from accident, negligence or any cause whatsoever during the progress of the work and before the final acceptance thereof, and shall indemnify and hold the District harmless therefrom, and the bonds given by the Contractor shall hold and secure the said District free and harmless from any or all damage or expense whatsoever."

Did you have that section of the specifications in mind when you wrote this letter in which you

(Testimony of Stephen Davidson Bechtel.)

stated that you feared that the permanent lining that you contracted to build might cause you cost or expense during the time you were constructing the remainder of the tunnel?

A. I do not recall that; but we probably did. Now, on that point, in explanation of that point, I want to point out that we were advised verbally—I was, by Mr. Tibbetts, that the hazard of constructing type “A” in that formation that had been encountered up to that time, and particularly where we started to set the timbers back, was a real hazard, and that there possibly was criminal responsibility involved, and that we should be very careful, we should check that point and do everything we could not to make ourselves involved, not to get ourselves involved at least knowingly in a situation where there might be liability.

Q. Now, Mr. Bechtel, your letter was referring to the permanent lining; and on the matter of setting the timbers, you selected your own method of setting the timbers, and you found, at this time, that you had to set them back, and you were worried about the results that were involved in that, but that had nothing to do with your permanent lining or strength of it?

A. Well, Mr. Tinning, [1126] it did, in this way: as this tunnel was driven, the timber was set back a certain distance,—if I remember properly, about 3 inches outside of the neat lines; that is customary in driving the tunnel, because you expect it to take

(Testimony of Stephen Davidson Bechtel.)

some weight, to take some weight; and, instead of taking a nominal amount of weight which we expected as the tunnel progressed, it took a substantially larger amount of weight, greater weight; that was a condition which became apparent, and we addressed a letter—After we had these engineers,—Mr. Tibbitts and Mr. Phillips,—review the matter, they pointed this matter out; so that, at that time, we began to get considerably concerned over it,—over the hazard of setting the timber, trimming the timber, and the responsibility for it, and the effect of the weight it would have to stand; and it was after our discussions on the matter with Mr. Boggs, and endeavoring to avoid a lot of legal actions, et cetera. In any construction job, these changes come up; there are changes made, and the engineer sits down with the contractor, and the contractor sits down with the engineer, and the engineers usually don't have the advice of a lot of counsel, and the whole thing is done as a matter of equity and a matter of construction procedure.

Now, what happened here when we started to proceed? We tried to follow it through in that way; but we could not do it. Why couldn't we do it? Because there was a board of directors and because there was the District's attorney,—Mr. Tinning,—you; and you would not, in my opinion, permit things to go along in a normal way, which interfered with our progress; and that was one of the

(Testimony of Stephen Davidson Bechtel.)

causes of the delay; and it became more apparent as time went on.

Q. Mr. Bechtel, I seem to be the point of your remarks at this moment. In other words, because the District required you to build the tunnel in accordance with the plans and specifications in your contract,—the contract entered into by the Six Companies that you [1127] have told us about, and their constituents of long experience—because this District desired you to build it in accordance with the plans and specifications, you think the District was inequitable?

A. No; but I do say that, when you get a condition where the District's Engineer is not going forward in an engineering way, not making decisions and delaying decisions because of necessity of discussing it with a board of directors and discussing it with the District's attorney, you affect all of the secondary effects of this thing and delay the thing, and affect the construction of the job; then it is serious; and we tried for months and months and months to carry this thing as a construction procedure; we tried, with our consulting engineers—they had their discussions with Mr. Boggs, as Mr. Boggs will undoubtedly in due time testify, and they did not get any place at all; and, secondly, long discussions about getting approval from the United States Government, from the PWA people, from the Reclamation people.

(Testimony of Stephen Davidson Bechtel.)

Q. If you have thoroughly relieved your mind, let's get back to the question.

A. Well, I think it is very pertinent to this project; it has a very definite effect upon the progress of this work.

Q. I am going to ask you if there is one word in your letter of August 23rd respecting the resetting of timbers. Your whole letter is directed to the design of the finished section, is it not, which you desired to have modified?

A. I think that is correct. May I see the letter?

Q. There isn't any question about that, I think, Mr. Bechtel.

A. I think you are right.

Q. What you have been telling us about is the question of resetting timbers, putting them back,—that is what Mr. Tibbetts told you was dangerous; he did not tell you the design was dangerous, did he?

A. Yes, he did. [1128]

Q. He did? A. Yes.

Q. Well, what did the thickness of the design have to do with resetting timbers?

A. Well, the thickening of the design for the area ahead there, which, as I understood it, was recommended to your District Engineer.

Q. What did it have to do with resetting timbers?

A. In the area, in the matter of resetting timbers—

Q. Was there anything regarding timbers in the letter of August 23rd?

(Testimony of Stephen Davidson Bechtel.)

Mr. Smith: Just a moment. Let the witness finish.

Mr. Tinning: The witness answered everything but the question.

Q. Mr. Bechtel, was there anything in this letter of August 23rd, 1935, that had to do with the resetting of timbers, that was not mentioned? You have mentioned it twice here—that was not mentioned there. You are talking about the permanent design of the permanent arch?

A. I presume——

Q. Will you answer the question "Yes" or "No," and then explain?

A. You said I mentioned it twice; but, in writing a letter, it seems to me that you must consider the conditions which lead up to it and the condition subsequent thereto, to get the true reflection of the letter.

Mr. Tinning: We ask the answer of the witness go out as argumentative.

Mr. Smith: I submit the answer was called for. I think it is a proper explanation.

The Court: Let's proceed, gentlemen.

Mr. Tinning: Q. Mr. Bechtel, you stated that you thought that you would have extra compensation if you had to put in "B" section in any substantial amount above 200 feet?

A. Let me correct you. I don't think I said that: that it was contemplated in any [1129] particular amount. You asked the question if it was increased,

(Testimony of Stephen Davidson Bechtel.)

if the whole tunnel was put in "B", would we then be entitled to increased compensation; and I say "Yes."

Q. I will read you the provisions of Paragraph "G" of Section 32 of the Specifications now in evidence, which appear on page 61:

"Types of Tunnel Section: Two typical tunnel sections are shown on the plans. The District Engineer shall determine which section shall be used in any specific location in order to meet varying conditions which may be encountered. In general, it is expected that the Type 'A' section will be used throughout the major length of the tunnels, but if conditions arise which, in the judgment of the District Engineer, require the use of Type 'B' section, the Contractor shall make such modifications in construction as may be necessary."

You knew about this section when you considered this portion of the specifications, did you?

A. I presume I did. Yes, I read the specifications.

Q. As a matter of fact, the entire tunnel constructed by Six Companies up to the time they abandoned the work and quit the work and constructed by the other contractors who finished the work was constructed of "A" section, was it not?

A. I do not think any of it was constructed that way.

(Testimony of Stephen Davidson Bechtel.)

Q. In other words——

A. It was a modified "A" section that we placed in it, the details of which I cannot give you; but the conditions, the details of the construction, possibly were beyond, were outside of the "A" section neat, as specified in the plans.

Q. You were paid the monthly estimates on the "A" section, in accordance with your contract, for a period of approximately 15 months, and you never protested those payments?

A. There were some of the quantities that were protested; but substantially I should say [1130] it is correct.

Q. And the tunnel is there; the "A" section, for which you received these payments that I have referred to, is now standing up and being used by the public; that is true, isn't it?

A. It is standing up and being used by the public.

Q. And it was accepted by the State of California, and approved for acceptance by the United States, before it was turned over for public use?

A. I presume that is correct. [1131]

Q. Yes. Mr. Bechtel, I will hand you Plaintiff's Exhibit No. 49, in evidence, the letter which you wrote in behalf of Six Companies to the District, and delivered on August 28, 1935. There is one matter I have not gone into in detail in the letter of August 23rd, and which I would like to return to. You had in mind at the time that you were seeking

(Testimony of Stephen Davidson Beehtel.)

to modify the section that you referred to, strengthening the section, Section A, the same modification that if that was done the contractor would receive extra compensation for extra materials that were put into that section?

A. Our concern was to build a proper tunnel, and the matter of what the compensation would be would be determined in due time in a proper manner, and by a proper procedure, which had been discussed and was discussed immediately subsequent thereto, if there was any extra compensation we were entitled to, that would be determined. I think that I discussed with you and with your board our willingness to arbitrate any matters that were then existing, any controversy, and to submit the thing to any impartial people that would reasonably review the matter as to what the compensation would be; that that would be a matter of subsequent discussion and a matter of subsequent determination. What we were interested in doing was building that tunnel properly, to go right through and get the job finished, so that the job could be completed at the earliest practicable date, and that was our purpose and continued to be our purpose, and we worked right up to the time we were driven off the job with that purpose in mind.

Q. And at the time that you wrote the letter of August 23, 1935, will you say that you did not have in mind seeking additional compensation for additional work, labor, or material that was required in

(Testimony of Stephen Davidson Bechtel.)

the extra concreting that you desired to put into this arch?

A. I would say that I had framed the letter—
[1132]

Q. Will you answer "Yes" or "No," and then explain? A. I may have.

Q. You did have, didn't you?

A. I don't recall whether I had or not.

Q. Were you going to do it for the bid price?

A. That would be a matter of proper negotiations. I do not recall all of the circumstances surrounding the consideration. In discussing that letter, as you will remember, there were discussions going on at that time, and we were gravely concerned over the situation, I put hour after hour, and day after day, and night, going over the matter, not only myself, but in collaboration with Mr. Lawler and consulting engineers.

Mr. Tinning: I will ask your Honor to admonish the witness not to state things which are not responsive to the question. I asked a specific question.

Mr. Marrin: We submit the answer is entirely proper. He has gone on to explain his interpretation. He has a right to state what was in his mind.

The Court: I will allow it to stand. Proceed.

Mr. Tinning: Q. Did you expect extra compensation for extra work or material that might be required in thickening the arch?

A. I didn't know whether there would be extra compensation.

(Testimony of Stephen Davidson Bechtel.)

Q. Then is it your testimony that at the time you wrote this letter on August 23rd that you had no expectation of extra compensation if the District authorized the Six Companies to thicken that arch and modify the design?

A. I didn't know whether we were going to get extra compensation or not. We were endeavoring to have this thing done properly, we were endeavoring to follow out the advice of our engineers.

Q. You did not expect any extra compensation for what you proposed to do?

A. I did not say that. [1133]

Q. I asked you did you.

A. I say I didn't know whether we would get extra compensation or not, realizing that it would be decided on its merits in due time.

Q. What do you mean, by litigation, or arbitration, or what?

A. We hoped for arbitration.

Q. In other words, you hoped to modify the design and then seek to get your claim paid, your claim for extra work?

A. If it developed in the final analysis that the costs were different, that the job was different, in fact, if there was merit in it, in fairness we would expect extra compensation; on the other hand, if it was found by an arbitration board or by a court, as you put it at the time, of competent jurisdiction, it was not the case, we would not expect it, but we did want to build it properly, we wanted to build it expeditiously and economically.

(Testimony of Stephen Davidson Bechtel.)

Q. You wanted to get the concrete that you were putting in this one foot or more outside of the neat section, put inside the section where it became a paying quantity? A. Not necessarily.

Q. But outside it was not?

A. Not necessarily it was not. The recommendation of the Six Companies of California came in the form of discussions of our consulting engineers with your engineers; they are familiar with that; they will tell you that in due time, or I will get it for you if you would like to have it.

Q. We are interested in some 100 exhibits we have here now. We will now proceed. You have a copy of the letter of August 28, 1935, addressed to the Board of Directors, and this is already in evidence as Plaintiff's Exhibit 49, in which you refer to the contract which you entered into with the District, and state that

"The parties intended, and the contract and documents above mentioned forming a part thereof, and the geological report, contemplated that the two tunnels included [1134] within the contract would be excavated through ground which was represented to be and would be found to be self-supporting for nearly the entire length of the tunnels."

Now, Mr. Bechtel, that is the first time in writing that the Six Companies ever advanced the claim to the District that the geological report indicated you would have self-supporting ground through the ma-

(Testimony of Stephen Davidson Bechtel.)

jority of the tunnel—that was the first claim that was made in writing, was it not?

A. I believe that is correct.

Q. And this was approximately more than fourteen months, I would say it would be fair to say fourteen months, approximately, after the work under the contract was commenced and it was the first time you ever claimed that the geological report had misled you; that is true, is it not?

A. Apparently that is correct.

Q. During which time you had driven some 2,000 feet of tunnel, 1,000 feet in each bore, you had built a large part of the outside work, and you had received something in excess of a million dollars in payment from the District. That is true, is it not?

A. I do not recall the figures, but if you say so I will concur with you.

Q. That is generally true. You say then that

“The design and the plans and specifications call for the installation of Type A tunnel construction for 5620 feet of the total length of tunnels. We notified you in our letter to you dated August 23, 1935, that Type A tunnel construction is unsafe and inadequate for installation in the entire length of ground thus far encountered in the tunnels.”

In other words, that you wanted to put in some other kind of lining in the tunnel; you are talking about the permanent lining. That is correct, is it not?

(Testimony of Stephen Davidson Bechtel.)

A. The permanent lining, and also, I think, one would have to consider in reading that paragraph the preparatory work to the construction, prior to the permanent lining, but that is an incidental point.

Q. You desire now to testify that that paragraph should also be [1135] interpreted to include a reference to timbering and the work of re-setting?

A. I think in being read it should be kept in mind that other matters are affected, are to be considered.

Q. You have told us that before. Now, we refer to paragraph 4 of the letter:

"The character of ground encountered thus far in the excavation for the tunnels, with but slight exception, has been and is entirely and radically different from the character of ground represented to the contractor as that which would be encountered, and is likewise radically different from the character of ground which was contemplated by the specifications, as is apparent from the terms and conditions set forth therein. By reason of this fact we have been required to do additional work, supply additional materials, and have been put to great additional cost and expense not contemplated or intended by the contract, and not intended to be borne or assumed by the contractor in the construction of the tunnels. You are hereby notified that we, as contractor, now do claim

(Testimony of Stephen Davidson Bechtel.)

and will continue to claim against you for the entire additional cost and expense and the reasonable value, including a reasonable profit, of the additional work to which we have been and will be put, if we continue with the performance of our contract for construction of the tunnels."

Now at that time, that was the first time you claimed additional compensation, that is correct, is it not? A. I believe it is.

Q. In writing. And at that time, five days after your letter of August 23rd you were claiming additional compensation, but you say when you wrote your letter of August 23rd that you did not have that particularly in mind, that was something for the future?

A. This matter became of increasing concern to us.

Q. During those five days?

A. During the entire period of consideration, both from the time it became apparent that we had to trim [1136] and set back the timbers, and the ensuing period for several months in there it was an increasing concern.

Q. That concern had increased sufficiently so that from August 23 to August 28 it began to take a financial phase; on August 23 it was the basis of a desire of doing the job economically, one that the District would be proud of, and on August 28th you were desiring compensation for the extra work?

(Testimony of Stephen Davidson Bechtel.)

A. In addition to the other points.

Q. In addition to the other points? A. Yes.

Q. Then the next paragraph of the letter:

"At this time we are unable to furnish an exact detailed statement of the amount of our claim. It will include the reasonable value, including all costs and expense to which we may have been heretofore or may be hereafter put, of all additional excavation, timbering, concreting, and labor and materials of any kind or character occasioned thereby, including any and all items attributable thereto of any kind or character."

Now, by that term you refer to all of the material that was taken out, outside of the neat concrete line area, the area in which the timbering was installed, and timbers that you placed in, the concrete that you placed between the timbers; that is all included in what you had in mind as an itemized statement?

A. That should be all considered in determining the final cost or proper compensation, if any.

Q. Even though at the time you went underground in the proposal for this bid Mr. Larson said that he expected to use timber in the first 760 feet of the tunnel and let it remain in? That is true, is it not?

A. I cannot tell you exactly the thought that was in back of this thing, but a reasonable interpretation that I would give at this time is we would be entitled to the reason- [1137] able value of the in-

(Testimony of Stephen Davidson Bechtel.)

creased cost we were put to by conditions which were outside or contrary to the contract which we had made, and that would be our only expectation of getting that actually in the final determination.

Q. "You are further advised and notified that you are in default in performance of your obligations under our contract with you by reason of your failure to furnish necessary lines and grades and any other engineering which you are obligated to furnish under the terms of the contract."

Now, with reference to that, Mr. Bechtel, it is true, is it not, that as early as December 26, 1934, you had requested and demanded additional engineering and that on the 3rd of January, 1935, the District Engineer had told you that the engineering which was furnished by the District would continue just as it had been furnished previous to your written request of the 26th of December, 1934?

A. Yes, but that is not conclusive, it is always proper—it might be that he was wrong, and if so, we would be provided compensation in due time, and we are here reiterating our claim, our contention, for adequate compensation for that reason.

Q. And during all of the time that you were driving the tunnel you continued to furnish the work of engineering that was requisite to the performance of your work just as you had done it prior to the 26th of December?

A. Yes, we continued to do it, with the belief

(Testimony of Stephen Davidson Bechtel.)

that the District was obligated to do it, which we told them they were obligated to do, and which common practice required that they do, and we continued to do that, in order to see that this job went forward.

The Court: We will take a recess now until two o'clock.

(A recess was here taken until two o'clock p. m.)

[1138]

Afternoon Session

Wednesday, April 27, 1938

2 O'clock P. M.

STEPHEN DAVIDSON BECHTEL

Cross Examination (continued)

Mr. Tinning: Q. Mr. Bechtel, it is a fact, is it not, in any of the written requests that were made for an extension of time up to and including your letter of August 28, 1935, you made no reference to any alleged delays in receiving decisions from the District Engineer?

A. I don't recall any, Mr. Tinning.

Q. It is also a fact that, at no time to and including the 13th day of June, 1936, when Six Companies ceased work and prepared a purported notice of rescission, did Six Companies in writing ever make any complaint or statement or objection to the District that it had been delayed in progress

(Testimony of Stephen Davidson Bechtel.)
of the work by reason of the delay in the rendition
of decisions by the District Engineer?

A. I believe that Mr. Price——

Q. In writing?

A. No. However, I believe that Mr. Price, in
discussing the various matters on the job with Mr.
Boggs, told him about the delays,—that the delays
in getting decisions was affecting the work.

Mr. Tinning: We ask that the answer go out,
your Honor, as not responsive.

The Court: He answered “No”, and made the
explanation.

Q. Is that correct? A. Yes.

The Court: The answer was “No” as to the
written——

Mr. Tinning: But he said he believed someone
else——

The Court: What he believes may go out.

Mr. Tinning: Q. Mr. Bechtel, referring now
to Paragraph 7 of Plaintiff’s Exhibit No. 49, the
letter from Six Companies to the District dated
August 28, 1935,—which reads as follows: [1139]

“You are further notified that we have and
assert a valid claim for an extension of time
for the performance of our contract arising
from the causes heretofore stated to you in
our request for such extension dated June 10,
1935, and in addition to the extension of time
requested therein, we now assert a right to and
request such additional extension of time as

(Testimony of Stephen Davidson Bechtel.)

may be necessary to complete the contract, in the event that we continue to perform same, based upon the following reasons in addition to those heretofore asserted—”

Now, that is the first time that you have advanced, on behalf of Six Companies to the District, in writing, a statement that you were entitled to an extension of time due to ground conditions, is it not? A. No; I wouldn't so interpret it.

Q. When did you first, in writing?

A. The June 10th letter was sent to the District in confirmation of the discussions which I had had with Mr. Boggs in Mr. Price's presence, and this is a further elaboration on that. I believe that letter said that we may subsequently give you a more fully detailed statement of the reasons why we are entitled to an extension of time.

Q. That letter of June 10th is Plaintiff's Exhibit No. 45. Is it your testimony that that letter stated you had been delayed by heavy ground conditions?

A. May I see it, please, Mr. Tinning?

Q. I will read you the letter, but I won't read the address:

“Dear Sirs:

“Pursuant to the provisions of subsection C of Section 4 of the Specifications for the construction of the Broadway Low Level Tunnel, said section 4 having to do with the subject of time, we hereby make written application for

(Testimony of Stephen Davidson Bechtel.)

an extension of the time for completion of the work covered by the contract in the amount of one hundred eighty days.

“Said demand is based upon the provisions of said subsection C of section 4, and upon the grounds that the work has been delayed [1140] by Acts of God, stormy and inclement weather, and other reasons beyond our control which will have unavoidably delayed the work.

“The other reasons above mentioned may be made the subject of a detailed statement thereof by us at a later date.”

Is there anything in that letter, Mr. Bechtel, that stated, in writing, that you claim to have been delayed in your work by unanticipated heavy ground conditions? Will you answer “Yes” or “No”?

A. I think it is difficult to answer that “Yes” or “No”, Mr. Tinning.

The Court: Q. That letter that he has just read, coupled with the letter that you have there—that is the first writing on this subject?

A. Those two, yes.

Mr. Marrin: Mr. Tinning, I think it would be fair, in connection with the next question, to draw his attention to the letter of July 26, 1935.

Mr. Tinning: Yes.

Q. It is true, Mr. Bechtel, that the July 26th letter—in that letter, you referred to the ground conditions being far worse than you anticipated?

(Testimony of Stephen Davidson Bechtel.)

A. I do not carry that letter in my mind; but, if you say it is so, that makes it so.

Q. It is a fact, is it not, and it was called to your attention this morning?

A. Apparently so.

Q. There is nothing else beside the reference in the letter of the 26th of July that antedates the letter of August 28th, 1935?

A. Except the reference to the June 10th letter.

Q. You were asking for action on that letter; and, during the month from June 10, 1935, to July 12, 1935, you submitted no further reasons, in writing?

A. I think that is correct.

Q. Subparagraph "B" of paragraph seven of your letter of August 28th reads as follows: [1141]

"Inadequacy and unsafety of the design in accordance with our letter to you dated August 23, 1935;

"(c) Additional work required to be done not included, intended, or contemplated by the contract, plans and specifications."

The letter of August 23rd and the letter of August 28th were both in 1935, and were the first time that you had referred at any time, in writing, to having to do additional work; that is true, is it not?

A. I think that is correct.

Q. It is also true that the same letter was the first time that you ever had claimed there was any inadequacy or unsafety or insafety in the design?

(Testimony of Stephen Davidson Bechtel.)

A. Yes, with the exception of the discussions which our consulting engineers had with Mr. Boggs.

Q. I am talking about writings.

A. I said "Yes."

Q. The discussions with your engineers were some time after the first of August, were they not?

A. I believe that they were.

Q. Isn't it a matter of fact, Mr. Bechtel, that Mr. Tibbitts visited the ground on the 9th of August, 1935?

A. I don't know the date.

Q. You have not checked that up?

A. No; I have not checked it up.

Q. We will now proceed to the next paragraph of the letter,—paragraph 8:

"By reason of the facts asserted in this letter a right to rescind our contract with you has arisen in our favor, but we do not desire to exercise such right unless it is absolutely necessary, as we consider that it is the primary purpose and object of the District to complete the tunnel and the entire project as speedily as possible. If we exercise our right to rescind at this time, it will result in great delay to the project and might result in loss of a portion of the work already done in the construction of the tunnels. We are anxious that the work be completed, and to [1142] complete same for you; and we assume that you are of the same mind."

(Testimony of Stephen Davidson Bechtel.)

Now, when you wrote this letter on August 28, 1935, you knew, according to your letter, that you had a right to rescind?

A. We were so advised by our counsel.

Q. And you had legal advice?

A. That is correct.

Q. And that legal advice, having had that, you wrote this letter?

A. That is correct.

Q. And you also had legal advice when you wrote the letter of August 23, 1935?

A. That is right.

Q. Did you also have legal advice when you wrote the letter of July 26, 1935?

A. Yes. I think we had it practically throughout the entire year of 1935,—if that clarifies the point.

Q. Did you have legal advice when you wrote the letter of December 26, 1934, requesting the District to furnish additional engineering?

A. I don't recall; but I presume that we did.

Q. But, notwithstanding the fact that, on the 28th day of August, 1935, you were advised and so stated to the District that you had a right to rescind, you continued to work on these tunnels until the 13th day of July, 1936,—ten months later?

Mr. Marrin: June.

Mr. Tinning: June, yes.

The Witness: A. Yes. My explanation of that—I might comment on that: that this matter was considered by the Board of Directors of the Six Companies of California, and we had advice that

(Testimony of Stephen Davidson Bechtel.)

we were entitled to, or were privileged to, under our contract, stop,—refuse to go on; and to claim damages or costs for the work done to that time. In spite of the fact we were advised we had a right to do that, our board of directors as a whole favored going on,—desired to go on and complete this job; and we were in hopes that we could negotiate the matter out with the District on an equitable, [1143] fair, reasonable, basis; and we continued to hope so until June of the following year.

Q. Under the terms of the contract?

A. Under the terms of the contract.

Q. And during the succeeding ten months, to and including May of 1936, you received payments monthly from the District for the quantities and proportion of the work performed by you?

A. Yes; and in further explanation of that, I might comment: that we continued, on to the time until we finally were driven off the job, to negotiate the matter out with the District Engineer, with you, with the Board of Directors, with the PWA; and we had always hoped that we—that the matter could be amicably and reasonably settled with you, and continued in that hope and that expectation; and I also might comment that we continued to pour money into the hole for month after month, and not small money but hundreds and hundreds of thousands of dollars, to carry the work forward.

(Testimony of Stephen Davidson Bechtel.)

Q. But you were paid in accordance with the terms of the contract, each month from August, 1935 to and including the payment that you received in May of 1936, covering your May estimate, in accordance with the terms of the contract?

A. No. We were paid certain sums of money that were given us with your typed, or your regular monthly estimate, that paid in part for the work that was done; and we had notified you several times, in these various letters, up to date and subsequent letters, that it was not in full compensation; we never considered it was in full compensation; and you knew it was not in full compensation.

Q. Well, Mr. Bechtel, I object to your stating what I knew.

A. I say "You"—"The District"—because we had sent them letters.

Q. You mean you made certain communications; and, to follow that [1144] subject a little further, you were advised a number of times by the District that the District considered you were bound under the contract, and it was your duty to proceed?

A. That is correct.

Q. Now, coming back to the letter and reading paragraph 9:

"We invite your consideration to the various matters set forth in this letter, but must inform you at this time that if we continue with the work it will be only upon the following conditions:

(Testimony of Stephen Davidson Bechtel.)

“(a) That provision be made immediately to pay us the reasonable value of the additional work we have been called upon to perform, or which it may be necessary to perform hereafter.”

Was there any provision made at any time subsequent to the delivery of this letter on August 28, 1935, by which the District agreed to pay you anything additional?

A. No; but in explanation of that, one has to consider the subsequent matters that took place,—the cave-in,—the unforeseen cave-in that night that this letter was delivered to your Board of Directors; the negotiations which transpired for the next two or three months, at our instigation and also with the cooperation of your Board, and your Mr. Boggs, endeavoring to find a solution to this mutually difficult problem.

Q. Paragraph (b)—this was a condition upon which you would proceed with the work:

“An extension of time be granted immediately which will enable us to complete the work without penalty unless delay hereafter occur which is due to our fault.”

Now, no extension of time was granted?

A. No; we were told by Mr. Boggs, subsequently, in November—I was told, as I reviewed here last Friday, that we were entitled to an extension of time,—such an extension of time.

(Testimony of Stephen Davidson Bechtel.)

Q. You never received an extension of time?

A. No.

Q. And you continued with the work?

A. That is correct. [1145]

Q. And there was no discussion of extension of time from the time this letter was written on August 28, 1935, until this complaint which you say occurred in November of 1935?

A. If there were, I am not familiar with them.

Q. So far as you know?

A. I do not. None that I recall.

Q. And work continued?

A. That is correct.

Q. Section (c):

"Henceforth you perform all the necessary and proper engineering work, including the giving of all lines and grades, and assume responsibility for all engineering work which we have already performed and pay the cost of same."

Was any change made, in the engineering arrangement, after the delivery of this letter of August 28, 1935, up to and until the time that Six Companies ceased the work on the 13th of June, 1936?

A. No; it continued to be not as required or anticipated.

Q. The statement you would not continue to work on the tunnel unless these conditions were

(Testimony of Stephen Davidson Bechtel.)

met was a statement that you made at that time but you did continue the work?

A. Yes, we continued for the reasons I outlined here before; and after very careful consideration of our board of directors and the concurrence of all of them that we would proceed even though our legal counsel had advised us that we did have the right to stop work; we were not obligated, under the contract, to proceed, but that we of the board of directors desired to complete this job if it was possible at all.

Q. We will now proceed to paragraph 10 of the letter:

"We will proceed with installation of type 'A' tunnel construction in the excavated portion of the two tunnels from the westerly end thereof, subject to the conditions specified in our letter to you dated August 23, 1935. We will do this for the purpose of preventing any loss that might otherwise occur of the excavated [1146] portion of the tunnels in which concrete has not yet been installed, unless notified by you to cease such work. We will not perform any other work in the construction of the tunnels under our contract with you unless notified within a reasonable time after receipt of this letter that the conditions set forth hereinabove are satisfactory and will be met by you."

(Testimony of Stephen Davidson Bechtel.)

At any time subsequent to August 28, 1935, did the District advise you that it would meet the conditions which you sought to impose by that letter?

A. No; it did not.

Q. And you proceeded with the work?

A. We did. [1147]

Q. In order to complete the chronology, Mr. Bechtel, is it true that this letter was delivered to the Board of Directors of the District on August 28th, some time in the afternoon, I think the time was 3:50 in the afternoon, at which time there was a meeting between the Board of Directors of the District, in which a number of representatives of the Six Companies were present, including yourself, and I think Mr. Kaiser, and I think some of your present counsel, in which the matters referred to in the letter were discussed, and you were advised that the question of the adequacy of the design, etc., had been referred to an engineering board and that at a later date you would be advised what the position with respect to those matters was?

A. My recollection is it was referred to counsel for consideration.

Q. Referred to——

A. (Interrupting): You did most of the talking at that meeting, you will remember, Mr. Tinning.

Q. I do not recall; I think I heard you do considerable.

A. Mr. Kaiser did most of the talking that day.

Q. And then on the night of August 28th, I think

(Testimony of Stephen Davidson Bechtel.)

it was, some time around 7 or 8 in the evening that night, within a very few hours after this discussion of the adequacy of the design, and the engineering, and the different contentions that are set up in the letter had been discussed, there was a very serious cave-in of the north tunnel, in which three men were killed. A. Yes.

Q. That cave-in was not in a concreted portion of the tunnel, was it?

A. It was not. However, the footings had been concreted to that point.

Q. The footings were a concrete 5-foot wide strip upon which the arch was later poured; is that correct?

A. Upon which the side walls were first poured, over which the arch was subsequently poured. [1148]

Q. And supporting the arch they formed, you might call it, the bottom of the inverted horseshoe that formed the lining? A. Yes.

Q. And that burst of earth that came into that tunnel came from the timber which had been installed in the tunnel some time before and which were being re-set at that time by the crew that was working there to get the timbers back so that they would be safe in constructing the concrete lining as required by your specifications?

A. I cannot testify to that, Mr. Tinning; I had not been in that tunnel for several days prior to that cave-in, and anything that I might say would be a matter of observation thereafter, or from hearsay. I am not familiar with it.

(Testimony of Stephen Davidson Bechtel.)

Q. You do know that this cave-in was not in the permanent lining?

A. I observed that since that time.

Q. It was not in the lining which was referred to in your letter of August 23, 1935, and again referred to as inadequate and unsafe lining in your letter of August 28th?

A. It was preparatory to the liner which is involved there.

Q. Would you mind answering the question "Yes" or "No" and then if there is an explanation make it. The question was whether the slide occurred in a portion of the tunnel where the concrete lining, permanent lining had been installed.

A. A portion of the lining had been installed.

Q. Where the slide occurred?

A. The footing.

Q. The footing? A. Yes.

Q. Which were how deep?

A. I would say approximately five feet, four feet or five feet.

Q. High? A. Yes, on the side.

Q. And the timbers that failed were in the roof?

A. That is what I understand, but, again, that is from hearsay.

Q. So that there was no complete concrete lining at the place where [1149] the slide occurred?

A. That is correct.

Q. And the slide or cave-in occurred in temporary timbers which were installed by you precedent to placing the permanent lining?

(Testimony of Stephen Davidson Bechtel.)

A. It occurred in the timbers that were placed before the concrete lining was placed.

Q. The Six Companies put them in?

A. Yes, that is right, as I understand it.

Q. And it did not occur in the lining which you said in your two letters was inadequate and unsafe?

A. No, but in explanation of that I might comment that our letter of August 23rd was written in fear that such a situation might develop. We had been substantially scared by the advice we had gotten from our consulting engineers, they were afraid that something of that kind might happen if those timbers were set back, were moved, or were trimmed substantially, and it was growing out of that, their warning, that that letter was written, and this cave-in followed in due time, as you have outlined.

Q. Now, when you wrote that letter of August 23rd you knew that the dangerous condition was in the timbers due to the necessity of setting them back under the District's requirements—you knew that when you wrote the letter, your expert had told you that?

A. It was a type of timbering that was necessary to get the type of lining which we had been required to place.

Q. Now, you say that the footings had been poured. The Six Companies at this time, just a few days before the letter of August 28th, had started very active footwall operations, had they not?

A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. And at the time that the accident occurred at the bottom of each, on opposite sides of the tunnel, a trench had been excavated which was lower than the bottom of the posts into which you planned to pour concrete fittings?

A. Probably it would be more properly [1150] described as the excavation necessary to place the concrete footings.

Q. Do you know as a matter of fact that that extended below the bottom of the posts so that the bottom of the trench was lower than the bottom of the posts that supported the arch to the earth?

A. I do not quite follow you.

Q. Don't you know as a matter of fact that those trenches that were prepared in which the concrete was to be poured were excavated, dug out, so that the bottom of those trenches was below the plumb posts that formed the side of the tunnel timber arch, the ring?

A. I observed that subsequently.

Q. You did not know it at that time?

A. I had not been in that tunnel for several days, in that tunnel.

Q. And when those trenches were so excavated the bottoms of the plumb posts, the bottom posts, the vertical or nearly vertical posts were standing on a shelf of earth higher than the bottom of the trench which was excavated, so that the bottoms of those plumb posts were unsupported by any material except that which was directly below them?

A. I would not just put it that way. I might

(Testimony of Stephen Davidson Bechtel.)

observe that there was no excavated and unconsolidated footing in the area of the slide. I observed that myself. Also I might observe that there was no difficulty experienced at any place where these footings had been excavated and unconsolidated, and also that immediately following this slide these footings that had been excavated were consolidated forthwith; that we started an aggressive program to get our footings ahead and anticipated lining at a very rapid pace, which is practical under the method which we have outlined and which we had anticipated following.

Mr. Tinning: If your Honor please, I offer in evidence a letter dated August 30, 1935, written by Wallace B. Boggs, District Engineer, to Six Companies of California, as Defendant's Exhibit MM. It reads as follows:

DEFENDANT'S EXHIBIT MM

August 30, 1935

File: Broadway Tunnel
Six Companies of California,
Field Office,
Post Office Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

You are hereby advised that a very critical situation exists with respect to the stability

(Testimony of Stephen Davidson Bechtel.)

of the timbered section of the tunnels as a result of the large amount of footing trench now open.

There is now between 900 and 1,000 feet of this trench open, with varying depths below the timber footings. Much of this trench is filled with water, increasing the instability of the timber supports. It is extremely probable that the continuance of this condition will cause failure of timber supports, and it is possible that future failure may already have been induced.

You are advised that Joint Highway District No. 13 of the State of California will hold you strictly responsible for any damage of any sort whatsoever that may result from this condition or from any other inadequacy of the timbering to support the excavation.

Yours, truly,

(Signed) WALLACE B. BOGGS,
District Engineer.

WBB/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. MM. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit MM.")

If your Honor please, I offer in evidence a letter from Six Companies of California addressed to Mr. Wallace B. Boggs, District Engineer, on August 31,

(Testimony of Stephen Davidson Bechtel.)
1935, as Defendant's Exhibit NN. I will read it.
(Reading): [1152]

DEFENDANT'S EXHIBIT NN

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

August 31, 1935

**Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.**

Dear Sir:

We herewith acknowledge receipt of your favor of August 30th, relative to footing trench in the tunnels.

We checked this fully excavated footage late on August 31st, which measurements showed 339 ft. in the down-grade tunnel, and 306 ft. in the upgrade tunnel. At other places, where partial excavation had been made, none had gone far enough to expose the ground below the footings of the timber.

We poured approximately 200 lineal ft. of the above stated footage on August 30th in the upgrade tunnel, and on this date have completed pouring of the remainder of the open trench in this tunnel, namely, 106 ft.

It has obviously been impossible for us to pour the trench in the downgrade tunnel since

(Testimony of Stephen Davidson Bechtel.)

the cavein. However we are now planning to pour this open trench by pumping the concrete through the construction adit, and using buggies to transport it in the tunnel, just as soon as we consider it safe for men to work in the down-grade tunnel.

Our position with regard to our responsibility has been fully stated to you in our letters of August 23rd and 28th respectively.

Very truly yours,

SIX COMPANIES OF CALIFORNIA,

By (signed) T. M. PRICE

Project Manager

[Endorsed]: Received Sept. 4, 1935, 8:30 a. m.
Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. NN. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit NN.")

Q. The downgrade tunnel is where the cavein occurred?

A. The north tunnel.

Q. The north tunnel? A. Yes.

Q. Mr. Bechtel, so that the record may be clear, the adit is a cross-over drift from one tunnel to another and fortunately when this accident occurred there was such a drift beyond the point where the

(Testimony of Stephen Davidson Bechtel.)

slide occurred that opened the north tunnel into the south tunnel, through which the men were able to get out into the south tunnel? [1153]

A. Yes.

Mr. Marrin: I might say that letter is not signed by the witness, but by T. M. Price.

Mr. Tinning: I beg your pardon

Mr. Marrin: You did not read the signature.

Mr. Tinning: I will try to remember to do that.

The defendant offers in evidence a letter dated September 1, 1935, addressed by Six Companies of California to Mr. Wallace B. Boggs, District Engineer, and ask that it be marked Defendant's Exhibit OO. It is signed by Mr. Price. It reads:

DEFENDANT'S EXHIBIT OO

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

September 1, 1935

Mr. Wallace B. Boggs,

District Engineer,

Joint Highway District No. 13,

1448 Webster St., Oakland, Calif.

Dear Sir:

In the interest of safety, and in order to reduce the hazards connected with the work of trimming and moving tunnel timber supports

(Testimony of Stephen Davidson Bechtel.)

made necessary under the requirements of the plans and specifications for the Broadway Tunnels, to provide space for the minimum thickness of the concrete lining specified, it is suggested and we request that you direct us:

1. To complete the concreting of the unlined portions of the excavated tunnels with a crown height 6" lower than the crest of the present theoretical crown height.

If this permission is granted, we will cut out six inches at each side of our present steel tunnel forms at the vertical tangent sections about ten feet above the base of the concrete lining.

A neat transition as designed by your office will be used to joint to the present design section if this permission is granted.

This change will result in the addition of approximately 1,000 cubic yards of concrete in the open section of about 1,800 feet of unlined tunnel that will be affected.

2. To allow tunnel timbering, including posts, segments and wall plates, to project a maximum of 4" into the theoretical minimum thickness of concrete lining called for in the plans; provided:

(Testimony of Stephen Davidson Bechtel.)

- a. In each six-foot length of tunnel, openings of twelve inches or more in width, between sets, are made available for concrete, and are as great in area as those lost by the intrusion of the timbers;
- b. The concrete rings between the sets are continuous and not less than twelve inches in width uninterrupted by wall plates or other obstructions or by the arch segments not being in line with the posts;
- c. That whenever the thickness of concrete in front of the sets is reduced, then reinforcing steel sufficient to cause the ring concrete to react in conjunction with the arch concrete shall be furnished and placed by the contractor.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) **T. M. PRICE**

Project Manager

[Endorsed]: Received Sept. 2, 1935. Joint Highway District No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. OO. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk. [1154]

(The letter was marked "Defendant's Exhibit OO.")

(Testimony of Stephen Davidson Bechtel.)

If your Honor please, the defendant now offers in evidence a letter from Six Companies of California, signed by T. M. Price, Project Manager, dated September 3, 1935, addressed to Mr. Wallace B. Boggs, District Engineer of the District, and ask that it be marked "Defendant's Exhibit PP." It reads: [1155]

DEFENDANT'S EXHIBIT PP

Builders of Low Level Broadway Tunnel
Six Companies of California
Field Office Post Office Box 120
Berkeley, California
September 3, 1935

Mr. W. B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Dear Sir:

Under date of September 1st, we wrote you a letter concerning changes in plans and specifications for concrete lining of the excavated portion of the Broadway Tunnels.

By this letter we advise you that our letter of September 1st, above mentioned, was written and shall be considered by you subject only to the following further conditions:

1. That in making the suggestions contained therein, we assume no responsibility

(Testimony of Stephen Davidson Bechtel.)

or liability of any kind or character for any design suggested by us or the safety thereof, in the event you direct us to carry out the things stated in our letter.

2. That we reaffirm and state our position to be as stated in our letters to the Board of Directors of your District dated respectively August 23rd and August 28th, 1935.

3. That any rights that we may have, heretofore or now existing, in our relationship with you under our contract with you will not in any manner be prejudiced or altered in the event that you direct us to proceed, as suggested in our letter of September 1st.

4. It has been called to our attention that a large amount of additional reinforcing steel is now being placed in the concrete which is now being installed in the tunnels and also that more cement is being required to be placed in the concrete than is called for or required under the plans and specifications. You are hereby advised that the placing of such steel, the furnishing of more cement, and all other items of work, labor, or materials performed or furnished in connection with the prosecution of the tunnel work are being furnished solely upon the basis that the contract, plans and specifications are being varied

(Testimony of Stephen Davidson Bechtel.)

from, and we are entitled to additional compensation by reason of these particular facts as well as by reason of the matters and things stated in our letters of August 23rd and August 28th above mentioned.

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

[Endorsed]: Delivered by Barneyback. Received Sept. 3, 1935. Joint Highway Dist. No. 13. 5 p. m.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. PP. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit PP.")

The defendant now offers in evidence, if your Honor please, a letter addressed to Six Companies of California by the Joint Highway District, dated September 5, 1935, and ask that it be marked Defendant's Exhibit QQ. It reads as follows:

DEFENDANT'S EXHIBIT QQ

September 5, 1935

Six Companies of California
155 Sansome Street
San Francisco, California

Gentlemen:

The Board of Directors of Joint Highway District No. 13 has considered your letters of

(Testimony of Stephen Davidson Bechtel.)

August 23rd and August 28th, September 2nd and September 3rd, 1935. I am instructed to advise you that the Board of Directors have concluded that the design of the tunnel lining provided for in the plans and specifications is adequate in every respect for all of the conditions encountered and the materials at the site of the Broadway Low Level Tunnel, and that no variation, deviation or change will be made in the same, and that you will be held strictly to the performance of your contract of June 4, 1934 in accordance with the terms thereof, and the plans and specifications for the work included in your contract.

Further, the District denies all liability for any of your claims for extra work, labor, materials, cement or steel furnished or supplied by you in your work of construction under said contract.

Yours very truly,

(signed) HARRY M. STOW

Secretary

HMS:K

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. QQ. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk

(The letter was marked "Defendant's Exhibit QQ.")

(Testimony of Stephen Davidson Bechtel.)

Your Honor please, the defendant offers in evidence a letter dated September 5, 1935, signed by Wallace B. Boggs, District Engineer, and addressed to Six Companies of California, and I ask that it be marked "Defendant's Exhibit RR." It reads:

DEFENDANT'S EXHIBIT RR

September 5, 1935

Six Companies of California

Field Office

Berkeley, California

Attention of Mr. T. M. Price, Project Manager.

Dear Sir:

I am advised by you and Mr. O. W. Peterson, your engineer, that Six Companies of California, the contractor on the Broadway Tunnel Project, is planning to proceed with the pouring of concrete in tunnel bores using forms which will result in a permanent reinforced concrete tunnel lining which does not conform to the plans and specifications for the work.

You are hereby ordered to cease and desist in any such procedure as the same is entirely without authorization by this District and is a direct violation of your contract with the District. You are further advised that such work must not be performed and all steps on your part to perform such work as you have indicated you intend to perform, should immedi-

(Testimony of Stephen Davidson Bechtel.)

ately cease if the work is now in progress, and that any concrete tunnel lining placed in accordance with your proposal will be rejected by the District and will be ordered removed.

Yours very truly,

(signed) WALLACE B. BOGGS

District Engineer

WBB:K

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. RR. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit RR.")

If your Honor please, the defendant now offers in evidence a letter dated September 14, 1935, from Six Companies of California, [1158] addressed to Wallace B. Boggs, District Engineer, signed by T. M. Price, Project Manager, and I ask that it be marked "Defendant's Exhibit SS." It reads (reading):

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT SS

Builders of Low Level Broadway Tunnel
Six Companies of California
155 Sansome Street
San Francisco, California

September 14, 1935

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Dear Sir:

We desire to acknowledge receipt of your letter of the 5th instant.

Six Companies of California suggested the alternative plan outlined in our letter dated September 1st for concreting the tunnels for the purpose of making the construction operations safer and minimizing the damages which would result from exactly following the plans and specifications.

However, in view of the instructions contained in your letter, we shall proceed immediately to concrete the tunnels in strict compliance with the plans and specifications.

By doing so we do not waive any of our rights or any claims which we now have, or may hereafter have, against the District and you are notified that we shall claim and hold the Dis-

(Testimony of Stephen Davidson Bechtel.)

trict responsible for all damages resulting from this procedure.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

[Endorsed]: Received September 14, 1935,
3:35 P. M.

Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. SS. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit SS.")

Your Honor, there are four letters here that have to do with the request from the contractor for authority from the District to permit the timbers to remain in at certain places, and there are a lot of figures, and I think counsel is agreeable to my introducing the letters and not reading the station numbers.

I now offer in evidence a letter dated September 14, 1935, [1159] from Six Companies of California, signed by Mr. Price, to Wallace B. Boggs, District Engineer, and ask that it be marked "Defendant's Exhibit TT. It reads:

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT TT**Builders of Low Level Broadway Tunnel****Six Companies of California****Field Office Post Office Box 120****Berkeley, California****September 14, 1935.**

Mr. Wallace B. Boggs,
 District Engineer,
 Joint Highway District No. 13,
 1448 Webster Street,
 Oakland, California.

Dear Sir:

In accordance with the provisions of subparagraphs B and E, of numbered paragraph 5 of section 32 of the specifications for the construction of the Broadway Tunnel, your written permission is requested for the timbers to remain in the sections of the two tunnels hereinafter described.

The portions of the tunnels for which this permission is requested are described as:

	Down Grade	Up Grade
Arch Concrete	111+43 to 113+31	111+53 to 114+02
Footing Concrete		
Left	113+31 to 114+37	114+02 to 116+91
	114+92 " 116+00	118+59 " 121+59
	116+51 " 117+50	
	118+24 " 117+71	
Right	113+31 to 115+99	114+02 " 116+98
	118+34 " 118+66	118+16 " 118+42
		119+00 " 121+46

(Testimony of Stephen Davidson Bechtel.)

Concrete has already been placed in the sections above described; and, in addition, similar permission is requested for timbers to remain between stations 114+02 and 114+20, where concrete will be poured within the next twenty-four hours.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (Signed) T. M. PRICE,

P:C

Project Manager.

[Endorsed]: Received Sept. 16, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. TT. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit TT.")

The defendant now offers in evidence, if your Honor please, a letter dated September 16, 1935, addressed by Mr. Wallace B. Boggs, District Engineer of the District, to the Six Companies of California, and ask that it be marked in evidence as Defendant's Exhibit UU. It reads:

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT UU

September 16, 1935

File: Broadway Tunnel
Lining

Six Companies of California,
Field Office—P. O. Box 120,
Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

Receipt of your letter of September 14, 1935,
is acknowledged.

The alternate plan suggested by you would constitute a change in the plans and specifications to meet conditions created solely by your method of operation in delaying the placing of the permanent reinforced concrete lining, during which period the temporary timber support has generally intruded into the area required for the permanent tunnel lining specified.

No rights or claims have arisen or can arise in your favor by reason of your performance of your contract with the District in accordance with the plans and specifications, save the right to payment for the work performed, and the District has made and will make all payment in accordance with the terms of the contract.

Yours truly,

(Signed) WALLACE B. BOGGS,
District Engineer.

WBB:VE

CC to Mr. A. B. Tinning, Attorney.

(Testimony of Stephen Davidson Bechtel.)

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. UU. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit UU.")

Defendant now offers in evidence a letter dated September 16, 1935, addressed to Six Companies of California by the District, and ask that it be marked in evidence as Defendant's Exhibit VV. The letter reads as follows: [1161]

DEFENDANT'S EXHIBIT VV

September 16, 1935

File: Broadway Tunnel

Timbering

Six Companies of California,

Field Office

Post Office Box 120,

Berkeley, California.

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

In reply to your communication of September 14, 1935, you are advised as follows:

In accordance with the provisions of subsections (b) and (e) of numbered subsection 5, Section 32 of the specifications, consent is hereby given to permit timbering to remain in the sections of the tunnels described in your

(Testimony of Stephen Davidson Bechtel.)

communication, subject, however, to the provisions contained in the specifications with respect to clearances outside of the concrete lining, and other requirements of the specifications.

In addition, this consent is extended to all portions of the excavation now open in each tunnel between the West Portal and the easterly ends of the full section excavation in the vicinity of Sta. 122 in the Downgrade Tunnel and the vicinity of Sta. 124+50 in the Upgrade Tunnel, subject to provisions contained in the specifications with respect to clearances outside of the concrete lining, and other requirements of the specifications.

Yours very truly,

(Signed) WALLACE B. BOGGS,

District Engineer.

WBB:VE

CC to Mr. Archibald B. Tinning, Attorney.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. VV. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit VV.")

The defendant offers in evidence a letter from Six Companies of California, signed by T. M. Price, dated September 16, 1935, addressed to Wallace B. Boggs, District Engineer, and ask that it be marked

(Testimony of Stephen Davidson Bechtel.)
'Defendant's Exhibit WW.' The letter reads as follows: [1162]

DEFENDANT'S EXHIBIT WW

Six Companies of California
Field Office Post Office Box 120
Berkeley, California

Sept. 16, 1935

Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster Street, Oakland.

Dear Sir:

In accordance with the provisions of sub-paragraphs B and E, of numbered paragraph 5 of section 32 of the specifications for the construction of the Broadway Tunnel, your written permission is requested for the timbers to remain in the following section in the up-grade tunnel:

Station 119+25 to Station 119+43.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

P:C

[Endorsed]: Received J. H. D. #13. Sept. 17, 1935

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft.'s Ex. WW. Filed April 27, 1938.

(Testimony of Stephen Davidson Bechtel.)

Walter B. Maling, Clerk. By A. J. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit
WW.")

The defendant offers in evidence a letter from
Six Companies of California, signed by T. M. Price,
to Wallace B. Boggs, District Engineer, dated Sep-
tember 16, 1935, and ask that it be marked Defend-
ant's Exhibit XX. It reads as follows:

DEFENDANT'S EXHIBIT XX

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

Sept. 16, 1935

Mr. Wallace B. Boggs,

District Engineer,

Joint Highway District No. 13,

1448 Webster St., Oakland.

Dear Sir:

In accordance with the provisions of sub-
paragraphs B and E of numbered paragraph
5 of section 32 of the specifications for the con-
struction of the Broadway Tunnel, your writ-
ten permission is requested for the timbers to:

(Testimony of Stephen Davidson Bechtel.)

remain in the following section in the up-grade tunnel:

Station 114+20 to Station 114+30.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager.

P:C

[Endorsed]: Received Sept. 17, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. XX. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit XX.")

Your Honor, the defendant offers in evidence a letter dated September 17, 1935, signed by Mr. Price, as Project Manager of Six Companies of California, and addressed to Wallace B. Boggs, District Engineer, and ask that it be marked "Defendant's Exhibit YY." The letter reads as follows: [1163]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT YY

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office—P. O. Box 120

Berkeley, California

September 17, 1935

Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster St.,
Oakland.

Dear Sir:

Correcting our letter of September 16,
wherein we asked for timbers to remain in
place from station 114+20 to station 114+30.

This should read "from station 114+20 to
station 114+38."

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

P:C

[Endorsed]: Received Sept. 18, 1935. J. H. D.
#13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. YY. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit
YY.")

(Testimony of Stephen Davidson Bechtel.)

Defendant offers in evidence a letter dated September 17, 1935, addressed by Six Companies of California, signed by Mr. Price, to Wallace B. Boggs, District Engineer, and I ask that it be marked Defendant's Exhibit ZZ. It reads as follows:

DEFENDANT'S EXHIBIT ZZ

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office—Post Office Box 120

Berkeley, California

September 17, 1935

Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster St., Oakland.

Dear Sir:

In accordance with the provisions of subparagraphs B and E, of numbered paragraph 5 of section 32, of the specifications for the construction of the Broadway Tunnel, your written permission is requested for the timbers to remain in the following sections:

In the Down-Grade Tunnel—Footing Concrete.

Left-hand side, from station 116+00 to station 116+51.

Right-hand side, from station 115+99 to station 118+34.

1344 *Six Companies of California vs.*

(Testimony of Stephen Davidson Bechtel.)

In the Up-Grade Tunnel—Arch Concrete.

From station 114+38 to station 114+56.

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE,

Project Manager

P:C

[Endorsed]: Received Sept. 18, 1935. J. H. D.
#13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. ZZ. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The document was marked "Defendant's Exhibit ZZ.")

I think it may be said, so that we won't have to refer to this again, Mr. Boggs' letter authorizing portions of the excavated tunnel to have the timbers remain in crossed the letters of the 16th and 17th [1164] in the mail, as the receiving date shows.

Mr. Marrin: Yes. [1165]

Mr. Tinning: If the Court please, the defendant offers in evidence a letter dated September 16, 1935, addressed by myself to Mr. Max Thelen, Attorney at Law. I suppose it will be stipulated Mr. Thelen was acting for Six Companies at that time?

Mr. Marrin: Yes; and that you were acting for the District.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: And I was acting for the District. We ask that the letter be admitted as "Defendant's Exhibit AAA."

(The letter was marked "Defendant's Exhibit AAA.")

Mr. Tinning: [1166]

DEFENDANT'S EXHIBIT AAA

September 16, 1935

Mr. Max Thelen
Attorney at Law
Balfour Building
San Francisco, California

Dear Mr. Thelen:

This letter will confirm our conversation of Saturday morning, September 14th, in which I advised you that the District would be willing to consider a request from Six Companies of California, the contractor, for permission to install the permanent reinforced concrete lining in the sections of the Broadway Tunnel bores now open, provided the State of California, the United States Bureau of Public Roads and the Public Works Administration agreed to such modification, upon the condition that the contractor waived all of the claims, contentions and demands set forth in its letters of July 26th, August 23rd, August 28th and September 3rd, 1935, addressed to the District, and

(Testimony of Stephen Davidson Bechtel.)

that if the contractor did not care to withdraw the claims, demands and contentions referred to that the District's position was that the contractor should proceed to construct the tunnel in accordance with the plans and specifications without further delay.

This letter is sent you as a matter of record of our conversation.

Yours very truly,

(Signed) ARCHIBALD B. TINNING

Attorney

924 Main Street

Martinez, California

ABT:EK

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Exhibit AAA. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant now offers in evidence a letter dated September 17, 1935, addressed by Six Companies of California and signed by T. M. Price, Project Manager, to Wallace B. Boggs, District Engineer; and ask it to be marked "Defendant's Exhibit BBB."

(The letter was marked "Defendant's Exhibit BBB.")

[Set forth in the Book of Exhibits at page 393.]

[1167]

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: The defendant offers in evidence a letter dated September 19, 1935, written by Wallace B. Boggs, District Engineer, to Six Companies of California; and ask that it be marked defendant's exhibit in proper order.

(The letter was marked "Defendant's Exhibit CCC.")

Mr. Tinning: (Reading) [1168]

DEFENDANT'S EXHIBIT CCC

September 19, 1935

File: Broadway Tunnel

E. P. Schedule--Lining

Six Companies of California,

Field Office,

Post Office Box 120,

Berkeley, California

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

Information is requested as to your proposed schedule and methods of procedure in connection with the tunnel operations at the East Portal.

The District Engineer considers that a very serious hazard to the lives of workmen and to the structures exists at the East Portal from the probability of slides at the faces and sides of the main excavation, especially if early rains occur.

(Testimony of Stephen Davidson Bechtel.)

Permanent concrete tunnel lining should be placed at once a sufficient distance to provide support against ground movement and back-filling around Portal Building walls should be performed as rapidly as building construction operations will permit.

You are advised that adequate measures should be taken by you at once to protect the structures in this vicinity and the men working on these structures from the dangers of slides.

Yours very truly,

(signed) WALLACE B. BOGGS

District Engineer

WBF/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. CCC. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant offers in evidence a letter dated September 20, 1935, addressed by Six Companies of California, signed by T. M. Price, Project Manager, to Wallace B. Boggs, District Engineer; and ask that it be marked defendant's exhibit in proper order.

(The letter was marked "Defendant's Exhibit DDD.")

Mr. Tinning: (Reading) [1169]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT DDD

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

Sept. 20, 1935

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
1448 Webster St., Oakland.

Dear Sir:

We have your letter of September 19, relative to work at the east portal, and wish to advise that we are at present working three shifts ringing out the arch on both tunnels for a distance of about forty feet underground, and it is our intention, as soon as this is done, which we expect will be within a week, to drift for the walls the same distance we have ringed out, and to immediately form this with wood forms and get the concrete poured, so we can do the necessary backfill.

This work is being carried on three shifts per day, and will continue so until this work outlined is accomplished.

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

P:C

(Testimony of Stephen Davidson Bechtel.)

[Endorsed]: Received Sept. 21, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. DDD. Filed April 27, 1938. Walter B. Maling, Clerk. By A. J. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant now offers in evidence, your Honor, a special safety order issued by the Industrial Accident Commission of the State of California, on the 19th day of September, 1935, and received by the District on September 20, 1935——

Mr. Trefethen: Issued what date, did you say, Mr. Tinning?

Mr. Tinning: Issued September 19th; and received by the District September 20, 1935—and ask it be marked “Defendant’s Exhibit EEE.”

(The document was marked “Defendant’s Exhibit EEE.”)

Mr. Tinning: [1170]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT EEE

T. A. Reardon,
Chairman

Frank J. Burke,
Secretary

Meredith P. Snyder

Frank C. MacDonald

Members

State of California

Department of Industrial Relations

Industrial Accident Commission

State Building

San Francisco

**SPECIAL SAFETY ORDER REQUIRING
REMEDYING OF UNSAFE CONDI-
TION OF PLACE OF EMPLOYMENT**

September 19, 1935

To: Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster Street,
Oakland, California.

Whereas, it appears from the report of inspection, dated September 19, 1935, of operations, located at Broadway Tunnel, Oakland, a place of employment, made by L. K. Reinhardt, that a dangerous condition exists in said place of employment, to-wit, Maintenance of equipment, in violation of the safety orders issued by the Industrial Accident Commission, of the State of California, and that Joint Highway

(Testimony of Stephen Davidson Bechtel.)

District No. 13, is the owner or person having the custody, management, or operation of said equipment; and

Whereas, this Commission did on the _____ day of _____ 19____, serve notice on said _____ with a copy of said inspection report attached, directing him or them to show cause, if any he or they had, in writing to this Commission on or before _____, 19____, why said recommendations of said engineer or inspector as set out in said report should not be complied with, and said _____ was further notified therein that, unless good cause be shown to the contrary to this Commission by said _____ before said date, the requirements or recommendations of said engineer or inspector would be adopted as the safety requirements of the Industrial Accident Commission, relative to said place of employment with particular reference to the use of said equipment, and the use of said equipment would be prohibited, and

Whereas, said _____ has made no return or insufficient return to said notice and has not submitted sufficient reason or shown good cause why action should not be taken to prohibit the use and operation of said equipment until such requirements be complied with;

Now, therefore, the following special safety order is hereby made as the order of the In-

(Testimony of Stephen Davidson Bechtel.)

dustrial Accident Commission relative to said equipment confirming said inspection report and the requirements and recommendations therein contained.

It is hereby found and determined that the place of employment of said Joint Highway District No. 13, consisting of a tunnel, located at Oakland, California, is unsafe and dangerous to workmen employed therein and the following precautions must be taken to render the equipment reasonably safe for the use of employees;

1. All timbering in both the north and south tunnels shall not be removed and reset before concreting.

2. The concrete forms may be lowered sufficiently to clear encroachments in the tunnel section, or some other plan, whereby the timbering will not be disturbed, may be submitted to the Commission for approval.

It is further ordered that the use and operation of said equipment be and it is hereby prohibited until said conditions shall be rectified, as aforesaid;

And the Legal Department and/or any employee of the Commission are hereby authorized to attach notice of said prohibition to said equipment and to institute any civil or criminal

(Testimony of Stephen Davidson Bechtel.)

proceedings in the Courts which may be necessary to adequately enforce this order.

[Seal] T. A. REARDON

(Commissioner)

FRANK J. BURKE

Industrial Accident Commission

(Deputy Commissioner)

Dated at San Francisco, California, this 19th day of September, 1935.

[Endorsed]: Received Sept. 20, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. EEE. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: Gentlemen, I assume it may be stipulated that a like order was received by the Contractor?

Mr. Marrin: Yes. I was just going to ask you to stipulate the same thing, Mr. Tinning,—an order identical with this was received by the Six Companies of California about the 19th or 20th day of September; I am not sure of the date—with the exception it was addressed to Six Companies of California rather than the District.

Mr. Tinning: Yes.

Mr. Smith: Also, isn't the original of the order on a printed form? Was some of this language

(Testimony of Stephen Davidson Bechtel.)

in printed form and not specially directed—it is correct it is on a printed form, isn't it?

Mr. Tinning: Yes; and I have read a copy in full, in view of the admonitions that I have had from counsel previously.

Mr. Smith: Yes. There were so many blanks, it did not sound intelligible.

Mr. Tinning: And it is a fact that, prior to the issuance of that order, there was no hearing held by the Industrial Accident Commission; these blanks were not filled in for that reason.

Mr. Marrin: No hearing was held.

Mr. Tinning: I think it can also be stipulated that both the Contractor and the District ceased and desisted, and complied with the order at that time; that you did nothing further at that time in the way of work.

The defendant offers in evidence a letter dated September 25, 1935, addressed by the District Engineer, Wallace B. Boggs, to Six Companies of California; and ask it be marked defendant's exhibit in [1172] proper order.

(The letter was marked "Defendant's Exhibit FFF.")

Mr. Tinning: (Reading)

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT FFF

September 25, 1935

File: Broadway Tunnel

Guniting rings

Six Companies of California

Field Office

Post Office Box 120

Berkeley, California

Attention of Mr. T. M. Price, Project Manager

Dear Sir:

With reference to your communication of September 17, 1935, in which you submitted a plan to use Guniting rings on portions of the tunnel construction, it is my understanding from conversations with you in the last few days that you wished this matter withdrawn from further consideration.

Kindly advise me if my understanding is correct in this respect.

Yours very truly,

(signed) WALLACE B. BOGGS

District Engineer

WBB/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. FFF. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: The defendant offers in evidence a letter dated September 26, 1935, addressed by Six Companies of California to Wallace B. Boggs, District Engineer, and signed by T. M. Price, Project Manager; and ask it be marked.

(The letter was marked "Defendant's Exhibit GGG.")

Mr. Tinning: (Reading) [1173]

DEFENDANT'S EXHIBIT GGG

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

September 26, 1935

Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster St., Oakland.

Dear Sir:

Acknowledging your letter of September 25, with reference to the proposed Gunite rings:

It is our desire to withdraw this matter from further consideration.

However, we are going to put in a few feet of this material in the grade tunnel, ahead of the upper forms and outside the concrete sec-

(Testimony of Stephen Davidson Bechtel.)

tion, for the purpose of blocking the timbers and making it safer to remove cross bracing.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) T. M. PRICE

Project Manager

P:C

[Endorsed]: Received Sept. 27, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. GGG. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Smith: Did the original of that letter show up?

Mr. Tinning: There is no word on it; I just checked it up before I left.

The defendant offers in evidence a letter dated September 27, 1935, addressed to Messrs. Thelen & Marrin, Attorneys at Law, Balfour Building, San Francisco, California, and signed by Archibald B. Tinning, Attorney; and ask that it be marked defendant's exhibit in proper order.

(The letter was marked "Defendant's Exhibit HHH.")

Mr. Tinning: (Reading) [1174]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT HHH

September 27, 1935

Messrs. Thelen & Marrin
Attorneys at Law
Balfour Building
San Francisco, California
Attention Mr. Max Thelen

Dear Mr. Thelen:

This letter is written in accordance with my telephone conversation with you this afternoon, in which you requested me to put my inquiry in writing in order that you might discuss it with your clients, Six Companies of California, which contracted to construct the project of this District under the contract dated June 4, 1934.

Will the contractor and its bondsmen agree, if permission is granted by the District to install the permanent reinforced concrete tunnel lining in the portions of the tunnel bores which have been excavated but are not now lined with the permanent tunnel lining called for in the plans and specifications, to a section with an intrados crown position ten inches lower than the present designed crown position provided for in the plans and specifications, and with the position of the interior walls of the sides of the tunnel lining a maximum of six inches inside of the present designed position, and to all of the dimensions shown on the preliminary plat presented by the District Engineer to the

(Testimony of Stephen Davidson Bechtel.)

Industrial Accident Commission at its hearing on September 24, 1935, and to install proper transitions from the special sections of the permanent lining to the sections of the permanent lining built in accordance with the original design, and to make such alteration in the location of the ceilings, flues, hangers and other details of the completed structure as are determined necessary by the District Engineer to adjust the same to the special section, all without extra charge to the District, and at the price per lineal foot for completed tunnel provided in the contract of June 4, 1934, the District to pay for all reinforcing steel placed in the lining at the unit price provided for in the contract.

Your reply will be communicated to the Government Engineer, a request having been received by the District from the Government Engineer for this information for use in determining whether or not the Government Engineer will authorize the installation of the special section of permanent lining in accordance with the recommendation made by the District Engineer at the meeting of the Industrial Accident Commission on September 24, 1935.

Yours very truly,

(signed) ARCHIBALD B. TINNING

Attorney

924 Main Street

Martinez, California

ABT:EK

(Testimony of Stephen Davidson Bechtel.)

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. HHH. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant offers in evidence a letter dated September 30, 1935, addressed to the District Engineer by Edward J. Neron, Deputy Director of the Department of Public Works of the State of California.

Mr. Marrin: Just a moment, Mr. Tinning. I don't know about this letter. There will be no objection. You may proceed.

Mr. Tinning: And the defendant asks that the letter be marked defendant's exhibit in proper order. [1175]

(The letter was marked "Defendant's Exhibit III.")

Mr. Tinning: (Reading) [1176]

DEFENDANT'S EXHIBIT III

Frank F. Merriam
Governor of California
State of California

Earl Lee Kelly
Director
Department of Public Works
Sacramento

September 30, 1935

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
Of the State of California,
1448 Webster Street,
Oakland, California.

(Testimony of Stephen Davidson Bechtel.)

Dear Mr. Boggs:

Receipt of your letter of September 30th, requesting permission to install a special section in the portions of the Broadway Low Level Tunnels which have been excavated but are not now lined with permanent tunnel lining, with the crown position ten inches lower than provided for in the Plans and Specifications, and with the interior walls of the sides of the tunnel linings a maximum of six inches inside of the present designed position, and to all of the dimensions shown on the blue print accompanying said letter designated, "Joint Highway District No. 13, State of California, Alameda Co.-Contra Costa Co. Main Tunnel Special Section Type A", dated September 28th, 1935, is acknowledged.

After considering the same, you are hereby authorized to install the permanent reinforced concrete tunnel lining to the dimensions and in accordance with the design set forth on the blue print entitled, "Joint Highway District No. 13, State of California, Alameda Co.-Contra Costa Co. Main Tunnel Special Section Type A", dated September 28th, 1935. The installation of such lining is authorized only for those portions of the tunnel bores which have been excavated and are now open and supported by temporary timber supports, and all portions of the tunnel bores which have not been excavated

(Testimony of Stephen Davidson Bechtel.)

are to be lined with permanent tunnel lining to the dimensions provided for in the Plans and Specifications.

Yours very truly,

(signed) EDWARD J. NERON

Deputy Director.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. III. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant offers in evidence a letter from Messrs. Thelen & Marrin, signed by Max Thelen, addressed to Archibald B. Tinning, Attorney at Law; and, under the stipulation heretofore made, Thelen & Marrin are counsel for the plaintiff in this action and were at that time; and I was representing the District.

Mr. Marrin: Yes.

Mr. Tinning: And the defendant asks that the letter be designated defendant's exhibit next in order,—the letter being dated October 3, 1935.

(The letter was marked "Defendant's Exhibit JJJ.")

Mr. Tinning: (Reading) [1177]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT JJJ

Max Thelen

Paul S. Marrin

Law Offices of
Thelen & Marrin
Balfour Building
San Francisco

October 3, 1935

Mr. Archibald B. Tinning,
Attorney at Law,
924 Main Street,
Martinez, California.

In re: Broadway Tunnels

Dear Mr. Tinning:

Referring to your letter of the 27th, ult. in the above entitled matter, please be advised that Six Companies of California will, without extra charge to the District by reason of the doing of the same, perform the acts listed in that portion of the second paragraph of your letter which precedes the words "all without extra charge to the District" and will act in accordance with the preliminary plat referred to by you or such modification thereof as may, from time to time, be agreed upon.

This commitment by the Company is not to be extended further than a commitment to perform these particular items without extra charge to the District.

(Testimony of Stephen Davidson Bechtel.)

The matter of the bondsmen we believe to be covered by Paragraph 14 of the Contract of June 4, 1934, between the District and Six Companies of California.

Very truly yours,

THELEN & MARRIN

By (signed) MAX THELEN

MT:MF

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. JJJ. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: The defendant now offers in evidence, if the Court please, a letter dated October 8, 1935, addressed to Wallace B. Boggs, District Engineer, signed by Six Companies of California, by S. D. Bechtel, President, and also by the Attorney in Fact, or some other properly authorized official of all of the 16 surety companies who were on the bond, on this contract; the letter being a request to grant permission.

(The letter was marked "Defendant's Exhibit KKK.")

Mr. Tinning: (Reading) [1178]

[Set forth in the Book of Exhibits at page 397.]

Mr. Tinning: The defendant offers in evidence a letter dated October 21, 1935, addressed to the District by C. H. Sweetser, District Engineer, United States Department of Agriculture, Bureau of Pub-

(Testimony of Stephen Davidson Bechtel.)
lic Roads, District No. 2; and ask that it be marked
defendant's exhibit in proper order.

(The letter was marked "Defendant's Exhibit
LLL.")

Mr. Tinning: (Reading) [1179]

DEFENDANT'S EXHIBIT LLL

United States Department of Agriculture
Bureau of Public Roads
District No. 2

In your reply please refer to
File No—Calif PWC 2231

Phone: Sutter 3861

461 Market St.

San Francisco, California

October 21, 1935

Mr. W. B. Boggs
District Engineer,
Joint Highway Dist. No. 13
1448 Webster Street
Oakland, California

Dear Mr. Boggs:

I have your letters of October 12 and 14, asking my approval of the use of a revised section of concrete lining as shown on drawing 187/S dated September 28, 1935; this section to be used in all portions of the tunnels which were excavated and not lined on September 30, 1935.

Since this change is necessitated by reason of the safety order issued by the State Industrial Accident Commission and since the con-

(Testimony of Stephen Davidson Bechtel.)

tractor and his sureties have agreed to the change "without additional cost to the District for additional labor and material required—"

I am hereby giving my approval.

It is understood that in the portions of the tunnels yet to be excavated the original lining section of the contract will be adhered to.

Very truly yours,

(signed) C. H. SWEETSER

District Engineer

[Endorsed]: Received Oct. 22, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. LLL. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: To save putting a lot of extra matter in the record, I presume we can stipulate as to the Safety Order issued by the Industrial Accident Commission which authorized the drop section method to be worked out, and the date of the order was on or about the 24th of September—the hearing was held on the 24th of September, 1935.

Mr. Marrin: I think those orders of the Commission should all go in evidence. It is our intention to offer them if you do not want to offer them.

Mr. Wittschen: If you have them, you can put them in now or afterwards.

Mr. Marrin: We have them, and intend to put

(Testimony of Stephen Davidson Bechtel.)

them in, through Mr. Price, as we did a number of these other matters.

Mr. Tinning: I think we have them here. I may have overlooked it, but it occurred to me as we went along that possibly we might stipulate to it.

We will offer in evidence a letter from Wallace B. Boggs, addressed to Six Companies of California, dated November 8, 1935; and ask it be marked Defendant's Exhibit MMM.

:" (The letter was marked "Defendant's Exhibit MMM.")

Mr. Tinning: (Reading) [1180]

DEFENDANT'S EXHIBIT MMM

November 8, 1935

File: Broadway Tunnel
Six Companies of California, Inc.,
Field Office,
Post Office Box 120,
Berkeley, California.

Gentlemen:

The installation of the permanent reinforced concrete tunnel lining in the portions of the Broadway Low Level Tunnels which were excavated but not lined with such permanent lining on the 30th day of September, 1935, with an intrados crown position ten inches lower than the crown position called for in the plans and specifications and with the position of the interior walls of the sides of the tunnel lining a maximum of six inches inside of the position

(Testimony of Stephen Davidson Bechtel.)

provided for in the plans and specifications, and to all of the dimensions shown on Sheet 187-S of the plan, entitled "Main Tunnel Special Section Type A—Date September 28, 1935, Joint Highway District No. 13, State of California", the contractor to install proper transitions from the special sections of the permanent lining to the sections of the permanent lining built in accordance with the original design, and to make such alterations in the location of the ceilings, flues, hangers and other details of the completed structure as are determined to be necessary by the District Engineer to adjust the same to the special section, all without additional cost to the District for additional labor or materials required to change the form and position of the section, all as requested by you in your letter of October 8, 1935, addressed to me, is hereby authorized.

Yours very truly,

(signed) WALLACE B. BOGGS

District Engineer

WBB:MC

[Endorsed]: U. S. Dist Ct. N. D. Cal. No. 20101-R. Deft's Ex. MMM. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: The defendant offers in evidence a letter dated November 20, 1935, addressed by Six Companies of California, signed by S. D. Bechtel, President, to Wallace B. Boggs, District Engineer; and ask that it be marked "Defendant's Exhibit NNN."

(The letter was marked "Defendant's Exhibit NNN.")

Mr. Tinning: (Reading:) [1181]

DEFENDANT'S EXHIBIT NNN

Builders of Low Level Broadway Tunnel
Six Companies of California
155 Sansome Street
San Francisco, Calif.

November 20, 1935

Mr. Wallace B. Boggs, District Engineer,
Joint Highway District No. 13,
Of the State of California,
1448 Webster Street,
Oakland, California.

Dear Mr. Boggs:

Confirming our discussion of yesterday, please address correspondence relative to Broadway Tunnel construction to:

Six Companies of California,
P. O. Box 120,
Berkeley, California,

with copies to this office.

V. G. Hindmarsh, General Superintendent,
will be a proper party with whom to discuss

(Testimony of Stephen Davidson Bechtel.)

and handle matters pertaining to construction work.

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) S. D. BECHTEL

President

SDB:DP

[Endorsed]: Received Nov. 21, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. No. NNN. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: Q. It is a fact, is it not, Mr. Bechtel, that Mr. Hindmarsh became the General Superintendent of the tunnel work on or about the date of this letter?

A. No; he had become General Superintendent approximately at September 5, 1935.

Q. Some time in 1934, you notified the District that Mr. Price was Project Manager, and to communicate with him; and then, as a matter of fact, on or about the 5th of September, after the slide, Mr. Hindmarsh took charge and you gave us this notice about the 20th of November? A. Yes.

Q. Mr. Price was no longer in charge of the tunnel after September 5th?

A. Mr. Price continued as Project Manager.

Q. And Mr. Hindmarsh?

(Testimony of Stephen Davidson Bechtel.)

A. He took the responsibility pertaining to tunnel construction.

Q. Did he report to Mr. Price?

A. He collaborated with Mr. Price; worked with him.

Mr. Tinning: The defendant offers in evidence a letter from Six Companies of California, signed by Mr. V. G. Hindmarsh, addressed to Wallace Boggs, District Engineer, as Defendant's Exhibit "OOO."

(The letter was marked "Defendant's Exhibit OOO.")

Mr. Tinning: (Reading:) [1182]

DEFENDANT'S EXHIBIT OOO

Builders of Low Level Broadway Tunnel

Six Companies of California

Field Office Post Office Box 120

Berkeley, California

December 20, 1935

Mr. Wallace B. Boggs,

District Engineer,

Joint Highway District No. 13,

1448 Webster Street,

Oakland.

Dear Sir:

Since we have resumed excavating in the south tunnel, we have not been furnished lines and grades to work to by your engineering staff, and have been compelled to do this ourselves.

(Testimony of Stephen Davidson Bechtel.)

It is our understanding of the specifications, that you are obligated to furnish lines and grades to us, and we do not feel that we should be put in the position of doing this work, and assuming the responsibility involved in same. We have been doing it thus far, in order not to interfere with progress of the work, but we respectfully urge that you immediately arrange to give us the necessary lines and grades.

We shall be compelled to hold you responsible for the cost of our doing this work, and also for any results of same in the event that damage or loss occurs as a result of doing it, for the reason that it is your responsibility under the Specifications.

Very truly yours,

SIX COMPANIES OF CALIFORNIA,

By (signed) V. C. HINDMARSH,

[Endorsed]: Received December 21, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. No. 000. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

Mr. Tinning: Q. Mr. Bechtel, it is a fact that, after that letter was written, the District refused to furnish anything other than the engineering that had been furnished before that?

(Testimony of Stephen Davidson Bechtel.)

A. It did not, at that time, furnish us the lines and the grades.

Q. Anything additional to what had been furnished before? A. No.

Q. And that matter remained in the same status that it was,—a reiteration of your former request and the position of the District remained the same?

A. It continued a point of controversy.

Mr. Tinning: The defendant offers in evidence a letter dated December 28, 1935, addressed by Wallace B. Boggs, District Engineer, to Six Companies of California; and ask that it be marked as [1183] Defendant's Exhibit PPP. It reads:

DEFENDANT'S EXHIBIT PPP

December 28, 1935

File: Broadway Tunnel

Lines and Grades

'Six Companies of California,

P. O. Box 120,

Berkeley, California.

Gentlemen:

Receipt of your letter of December 20, 1935, in which you state that you are not being furnished lines and grades in accordance with the specifications, is hereby acknowledged. The contention set forth in the above mentioned communication appears to be the same that has been made by you at a former time and has

(Testimony of Stephen Davidson Bechtel.)

been fully covered in previous communications to you.

The District has fully met its obligations under the specifications in this respect and will continue to do so; therefore, the District is in nowise responsible for any costs of your engineering or for the results of your work.

Yours very truly,

(signed) WALLACE B. BOGGS

District Engineer

WBB:VE

CC to Six Companies of California, 155 Sansome St., S. F.

CC to Mr. Archibald B. Tinning, Attorney

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. No. PPP. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit PPP.")

In the chronology of these documents there have been certain documents already introduced that follow along. Plaintiff's Exhibit No. 50, a letter dated February 25, 1936, addressed to Mr. Caldecott, by Six Companies of California, relates to arbitration, and was introduced last Friday.

(Testimony of Stephen Davidson Bechtel.)

Plaintiff's Exhibit No. 51, a letter dated February 28, 1936, in which Mr. Caldecott replied to the Six Companies' letter of February 25, has already been introduced and likewise under Plaintiff's Exhibit 52 Mr. Kaiser's letter as President of Six Companies, dated February 29, 1936, referring to the arbitration matter, was introduced in evidence.

Following the letter of February 29, 1936 the next communication that we wish to offer is a letter from Six Companies of California [1184] signed by Henry J. Kaiser, President, dated April 20, 1936, addressed to the Board of Directors of the District, and we ask that it be marked in evidence as Defendant's Exhibit QQQ. It reads:

DEFENDANT'S EXHIBIT QQQ

Builders of Low Level Broadway Tunnel
Six Companies of California
Field Office—P. O. Box 120
Berkeley, California
April 20, 1936

Board of Directors,
Joint Highway District No. 13,
State of California,
1448 Webster Street,
Oakland, California.

Gentlemen:

This will serve as formal notice that by proceeding with the construction of the Broadway

(Testimony of Stephen Davidson Bechtel.)

Low Level Tunnels, the undersigned, Six Companies of California, does not waive, in any manner, the rights and claims which it has heretofore asserted and does now assert against your District.

The undersigned does, on the contrary, reaffirm and reassert all of its claims as heretofore stated to you in writing, including particularly the statement thereof contained in the letter dated August 28th, 1935, from us to you, and will continue to assert each and all of said claims and any others which may have since been made, either in writing or otherwise, until the same are fully satisfied.

Yours very truly,

SIX COMPANIES OF CALIFORNIA

By (signed) **HENRY J. KAISER**

President

Henry J. Kaiser/W

[Endorsed]: Received April 21, 1936. J. H. D.
#13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No.
20101-R. Deft's Ex. No. QQQ. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaefer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit
QQQ.")

(Testimony of Stephen Davidson Bechtel.)

Defendant offers in evidence a letter addressed by the Joint Highway District, signed by Thomas E. Caldecott, President, to Six Companies of California, dated April 30, 1936, and ask that it be received in evidence as Defendant's Exhibit RRR. It reads: [1185]

DEFENDANT'S EXHIBIT RRR

April 30, 1936

File: Broadway Tunnel
Six Companies of California,
P. O. Box 120,
Berkeley, California.

Gentlemen:

Your letter dated April 20th, 1936, has been received.

You were advised by this Board in its reply to your letter of August 28th, 1935, and at various conferences of the Board and your representatives, which have occurred since that date, that all of the claims and contentions asserted by you in that letter were without merit, and that you were obligated to complete the work you contracted to perform under the contract dated June 4, 1934, in accordance with all of its terms.

The position of the District is now reiterated in this reply to your letter of April 20th, 1936, and you are advised that the District considers

(Testimony of Stephen Davidson Bechtel.)

that all of the claims made by you are without validity or merit, and that you are bound by your contract with the District to complete the work undertaken by you in accordance with the terms of the contract.

Yours very truly,

JOINT HIGHWAY DISTRICT NO. 13
OF THE STATE OF CALIFORNIA.

(signed) THOMAS E. CALDECOTT
President

TEC/VE

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. No. RRR. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit RRR.")

The defendant now offers in evidence a letter dated May 8, 1936, signed by Six Companies of California, by Henry J. Kaiser, President, addressed to the Board of Directors of Joint Highway District No. 13, of the State of California, and ask that it be marked as Defendant's Exhibit SSS. It reads: [1186]

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT SSS

Six Companies of California
Latham Square Building
Oakland, California

May 8th, 1936

To the Board of Directors, Joint Highway
District #13 of the State of California,
1448 Webster Street,
Oakland, California.

Dear Sirs:

Pursuant to the provisions of Subsection (c) of Section IV of the Specifications for the construction of the Broadway Low Level Tunnel, said Section IV having to do with the subject of "Time", we hereby make written application for an extension of time for completion of the work covered by the contract in the amount of six hundred (600) days.

Such application is based upon the provisions of said Subsection (c) of Section IV and upon the grounds that the work has been delayed by acts of God, stormy and inclement weather, and other reasons beyond our control, which have delayed the work.

The other reasons above referred to may be made the subject of a detailed statement thereof to be submitted by us at a later date.

The making of this application is not to be deemed a waiver of any of the claims previously asserted by us and particularly as set

(Testimony of Stephen Davidson Bechtel.)

forth in our recent letter of April 20th, 1936
addressed to you.

Very truly yours,

SIX COMPANIES OF CALIFORNIA

By (signed) HENRY J. KAISER

President

[Endorsed]: Received 11.45 A. M. May 11,
1936. Joint Highway District No. 13. By L. V.
Eaton (signed) Assistant Secretary.

[Endorsed]: U. S. Dist Ct. N. D. Cal. No.
20101-R. Deft's Ex. SSS. Filed April 27, 1938.
Walter B. Maling, Clerk. By J. A. Schaertzer,
Deputy Clerk.

(The letter was marked "Defendant's Exhibit
SSS.")

Mr. Tinning: The defendant offers in evidence a
letter addressed by Harry M. Stow, Secretary, to
Six Companies of California, dated May 14, 1936;
and ask it be marked "Defendant's Exhibit TTT."
It reads: [1187]

DEFENDANT'S EXHIBIT TTT

May 14, 1936

Six Companies of California
Latham Square Building
Oakland, California

Attention of Henry J. Kaiser, President

Gentlemen:

At a meeting held on May 14, 1936, your let-
ter dated May 8, 1936, applying for a six hun-

(Testimony of Stephen Davidson Bechtel.)

dred day extension of time for completion of the work to be performed under your contract with this District, dated June 4, 1934, was denied by the Board of Directors of this District on the grounds that the contractor has not been delayed in the prosecution of the work to be performed under its contract by acts of God or stormy or inclement weather, or by any reason, which in the judgment of the District Engineer has unavoidably delayed the work, or by any other reason or reasons beyond the control of the contractor which have delayed the work.

Yours very truly,
(signed) HARRY M. STOW

Secretary

HMS:HR

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's Ex. TTT. Filed April 27, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit TTT.")

Mr. Tinning: If your Honor please, we propose next to introduce—and which we will ask the Court to accept—23 estimates, engineers' estimates, upon which payments were made from the commencement of the contract up to the payment in May of 1936.

(Testimony of Stephen Davidson Bechtel.)

The Court: Is that the payment from month to month?

Mr. Tinning: Payments made from month to month; and then, after that, we will introduce estimates that were brought up to June 13th; and then the estimate number 25, which was submitted in July; there are 25 of those altogether, and I know I cannot finish it—I do not propose to read you them all—I may be able to finish them by 4:15 or 4:20——

The Court: If there is no question about that, if you want a record on it, cannot it be stipulated that they may be introduced without going through the form?

Mr. Tinning: I think we could put them in, but the work in that is rather considerable. I would prefer to do that in the morning, if we could. We are almost through.

Mr. Wittschen: I suggest that they do go in and not be copied. They are in much better form than if copied in the record, and they might go in by stipulation.

Mr. Marrin: I think we have copies of all of those. I suggest that they be deemed read. I do not know what they have to do with the cross-examination of this witness. In fact, I think most of this stuff has gone in out of order; but we have made no objection. [1188]

Mr. Tinning: We have our theory of this matter.

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: It has gone so far; we are not objecting, but most of this is not cross-examination of the witness. However, as far as these estimates are concerned, you may introduce them and they may be deemed read, to save time, subject to our right to check them.

Mr. Tinning: They are photostats of the originals, so that they will not require much checking.

Mr. Wittschen: And they need not be copied.

Mr. Marrin: We will stipulate they need not be copied in the record, and deemed read; just put them in.

The Court: Either side can use them for any purpose they wish. Make your offer for the purpose of the record and to protect the record.

Mr. Tinning: Your Honor, there are 25 of these; and I think, in conformity with the agreement counsel has been good enough to make, I can set up the necessary copies. I think it is going to take me 10 minutes to divide them up and put them in; and we can do that in the morning.

The Court: Very well. We will take an adjournment now until tomorrow morning at ten o'clock.

(Thereupon, an adjournment was taken until Thursday, April 28, 1938, at 10 o'clock a. m.)

[1189]

THURSDAY, APRIL 28, 1938

STEPHEN DAVIDSON BECHTEL,

Cross Examination (Resumed).

Mr. Tinning: Q. Mr. Bechtel, were you present at a hearing before the Industrial Accident Commission of the State of California on September 24, 1935, at 2 o'clock p. m. in the State Building, San Francisco, when the matter of a safety order affecting the Broadway Low Level Tunnel was under consideration by the Industrial Accident Commission of the State of California?

A. I do not recall the date, but I attended such a meeting.

Q. Some time after the accident of August 28, 1935, and in connection with the modified section matter, in which for the progress of the work there had been an order made on the 19th of September prohibiting the resetting of timbers? A. Yes.

Q. And at that meeting do you recollect that Mr. Reardon was present, presiding as chairman, Frank C. MacDonald, one of the Commissioners of the Industrial Accident Commission, was also present, Frank J. Burke, Secretary of the Industrial Accident Commission, Mr. F. L. Lowell, Industrial Accident Commission safety inspectors or engineers, and Mr. L. K. Reinhardt, who also held a like position with the Commission, Mr. J. I. Ballard, Editor of the Western Construction News, Jack Norton, of the Oakland Tribune, O. W. Peterson, Six Companies of California, Thomas Soule, Chief Engineer, Industrial Indemnity Exchange, S. M. Jar-

(Testimony of Stephen Davidson Bechtel.)

rett, Safety Engineer, Industrial Indemnity Exchange—the Industrial Indemnity Exchange was your compensation insurance carrier on this job, was it not? A. Yes.

Q. J. Q. Barlow, one of the members of the Utah Construction Company, a constituent of Six Companies—

A. (Interrupting) He was one of their engineers. [1190]

Q. V. G. Hindmarsh, of Six Companies, T. M. Price, of Six Companies, George D. Whittle, United States Bureau of Public Roads, F. Modglin, the President, or he was connected with one of your constituent companies, was he not?

A. General Manager of McDonald & Kahn Company, Limited.

Q. Yourself, President of Six Companies, T. L. Phillips, who was one of your consulting engineers mentioned yesterday in connection with Mr. Tibbitts, Mr. D. Young, of MacDonald & Kahn, Mason D. Pratt, engineer for the Surety Companies on the bond, Max Thelen, attorney for Six Companies, DeLaney Smith, attorney for Six Companies, myself, attorney for Highway District No. 13, and Mr. Boggs, the engineer of Highway District No. 13. Do you remember that those persons were present at that time?

A. I do not recall each one of them, but, in general, you are correct.

(Testimony of Stephen Davidson Bechtel.)

Q. And at that time there was an official reporter present? A. I presume there was.

Q. There was a reporter there, and have you seen a transcript of the testimony?

A. I don't recall that I have or not, Mr. Tinning

Q. I will show you a copy of it. This is a copy, Mr. Bechtel, that I am showing you, and I am going to direct your attention to some matters on page 7. At that time and place were these questions or statements made to the Commission, commencing at the top of page 7:

“Mr. Tinning: I am not asking that anything be conceded. We only want our definite statement as to our position, as an excess of precaution. We waive nothing in connection with this plan. We are simply trying to state our position, not trying to put it to the side.

“Mr. Thelen: I may suggest that if references of that kind are made, we may have to introduce evidence to show that the references are not justified. We do not admit there has been any delay. [1191]

“Mr. MacDonald: I hardly think we will rule on the statement, but we will recognize and are compelled to recognize Mr. Thelen's right to file with this Commission any supplemental statement he may desire, setting forth the position of his clients.

“Mr. Thelen: I think that is very very fair.”

(Testimony of Stephen Davidson Bechtel.)

Now, if you will turn to page 6, line 13:

“Mr. Boggs. (Reading):

“ ‘The recommendation for a modification of the plan for the Broadway Low Level Tunnel which follows, is made solely because of the delay of the contractor in placing the permanent reinforced concrete tunnel lining in the portions of the tunnel bores which have been excavated, but not lined with the permanent lining called for in the plans and specifications.’ ”

I will return now to the remainder of Mr. Boggs' testimony on page 7:

“ ‘These open sections of the tunnel bores are supported by temporary timber supports which have been generally intruded into the space necessary for placing the permanent tunnel lining in accordance with the Plans and Specifications. If the permanent lining had been installed promptly after excavation the present condition of the timbers would not exist.

“ ‘To eliminate so far as practical the demonstrated hazard to the lives and safety of workmen arising from resetting the temporary timber supports, and, at the same time to provide a structure equal in strength and capacity to the original design, a modified design is recommended.

“ ‘In making this recommendation, or in its later authorization, it is not intended in any

(Testimony of Stephen Davidson Bechtel.)

respect to admit the modification is made because of any demand, claim, or contention of the Contractor which has heretofore been communicated to the Joint Highway District No. 13 of the State of California, or to any of its officers [1192] or employees, and the District if the modification is authorized, waives none of its rights under the contract dated June 4th, 1934, with the Six Companies of California.

“The District Engineer recommends as a design for the permanent reinforced concrete tunnel lining for those portions of both bores of the Broadway Lower Level Tunnel, which are now excavated and supported by temporary support, and in which the permanent tunnel lining has not yet been placed, a section with an intrados crown position 10 inches lower than the present designed crown position, the position of the sides of the tunnel lining 6 inches inside of the present designed position, and to all of the dimensions shown on the preliminary plat of Joint Highway District No. 13 of the State of California, entitled, “Modification Type A Section—Sept. 21, 1935.”

“This recommendation is that said modification in dimensions of the permanent reinforced concrete tunnel lining be authorized by the District, under all of the terms of the Contract, plans and specifications, for the sections of tunnels now open and unlined, the Contrac-

(Testimony of Stephen Davidson Bechtel.)

tor to be paid therefor at the price per lineal foot as provided in the contract of June 4, 1934 (extra concrete necessary to fill the space left by the contraction of the dimensions of the tunnel lining, to be furnished by the Contractor at its own cost), all reinforcing steel required in the construction of the modified section, to be paid for by the District at the unit price provided in the contract of June 4, 1934; the proposed modification of the tunnel lining will not apply to the portions of the tunnel bores which are already lined, nor to any portions which are not now fully excavated and supported by temporary timbering supports; and the Contractor will be required to excavate, and to install the permanent reinforced concrete tunnel lining in all [1193] parts of the bores not yet fully excavated, to the dimensions specified in the original plans and specifications, and to install proper transitions from the modified sections to the sections of lining built to the original design, and to make such alteration in location of the ceilings, flues, hangers and other details of the complete structure are determined necessary by the District Engineer to adjust such portions to the modified sections, all without any extra charge to the District, and at the prices provided in the contract of June 4, 1934.

...Before the above recommendation is finally approved by the Board of Directors of the Joint Highway District No. 13, it is sub-

(Testimony of Stephen Davidson Bechtel.)

ject to the approval by the Director of the Department of Public Works of the State of California, and the proper officials of the Bureau of Public Roads, and/or the P. W. A. of the United States, after which the Board of Directors of the Joint Highway No. 13, will act upon the recommendation for the modification.' "

Now, Mr. Bechtel, do you remember that at that hearing I have referred to that the statements which I have just read to you were made by Mr. Boggs?

A. I have a general recollection to that effect.

Q. They were substantially as appears here in this record? A. Yes.

Mr. Tinning: Do you desire this offered in evidence, this transcript?

Mr. Marrin: I think it should all go in.

Mr. Tinning: If your Honor please, we offer in evidence this transcript of the hearing, as Defendant's Exhibit UUU.

(The transcript was marked "Defendant's Exhibit UUU.")

[Set forth in the Book of Exhibits at page 403.]

Q. Subsequently, and after that hearing, on that day, Mr. Bechtel, the Industrial Accident Commission made a safety order which provided that no timber in either the north or south tunnel should be removed or re-set before concreting, and except in such special instances and under such

(Testimony of Stephen Davidson Bechtel.)
conditions as the representatives of the Industrial Accident Commission or the Commission might authorize. That is true, is it not?

A. That is substantially correct.

Q. It is true, is it not? It is more than "substantially correct."

A. The words you used may not be exactly verbatim of what they provided, that is what I am referring to. I do not remember the exact words.

Q. I understand.

Mr. Tinning: If your Honor please, the defendant offers in evidence the Industrial Accident Commission Special Safety Order, requiring remedying of unsafe condition of place of employment, dated September 24, 1935, addressed to Mr. Wallace B. Boggs, District Engineer, signed by T. A. Reardon, Commissioner, and Frank C. MacDonald, Commissioner, bearing the seal of the Commission, as Defendant's Exhibit VVV.

(The document was marked "Defendant's Exhibit VVV.")

Mr. Marrin, never having had an opportunity to see a copy of the order that went to you, after what was said yesterday, I understand that you received an order in the same form addressed to the Six Companies?

Mr. Marrin: Yes, that is my understanding, it was an order in the same form.

Mr. Tinning: And at the same time?

Mr. Marrin: Yes.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: We have already introduced in evidence and wish to read Defendant's Exhibit VVV. Industrial Accident Commission Special Safety Order Requiring Remedying of Unsafe Condition Of Place Of Employment. September 24, 1935.

[1195]

DEFENDANT'S EXHIBIT VVV.

Frank J. Burke, Secretary

T. A. Reardon, Chairman

Meredith P. Snyder

Frank C. MacDonald

Members

State of California

Department of Industrial Relations

Industrial Accident Commission

State Building

San Francisco

**SPECIAL SAFETY ORDER REQUIRING
REMEDYING OF UNSAFE CONDI-
TION OF PLACE OF EMPLOYMENT.**

September 24, 1935

To: Mr. Wallace B. Boggs,
District Engineer,
Joint Highway District No. 13,
1448 Webster St.,
Oakland, California

Whereas, it appears from the report of inspection, dated September 19, 1935, of operations, located at Broadway Tunnel, Oakland, a place of employment, made by L. K. Reinhardt, that a dangerous condition exists in said

(Testimony of Stephen Davidson Bechtel.)

place of employment, to wit: Maintenance and construction in violation of the safety orders issued by the Industrial Accident Commission of the State of California, and that Joint Highway District No. 13, is the owner or person having the custody, management, or operation of said equipment; and

Whereas, this Commission did on the 23rd day of September, 1935, serve notice on the said Wallace B. Boggs directing him to show cause, if any he had to this Commission, on or before September 24, 1935, why said recommendation of said Engineer or Inspector as set out in said report should not be complied with, and

Whereas, this Commission did, on the 24th day of September, 1935, at a hearing held in its offices in the State Building in the City and County of San Francisco, State of California, find that the requirements or recommendations of the said Engineer should be adopted as the safety requirements of the Industrial Accident Commission relative to the said place of employment,

Now, Therefore, the following special safety order is hereby made as the order of the Industrial Accident Commission relative to said place of employment confirming said inspection report and the requirements and recommendations therein contained.

It is hereby found and determined that the place of employment of said Joint Highway

(Testimony of Stephen Davidson Bechtel.)

District No. 13, consisting of a tunnel, located at Oakland, California, is unsafe and dangerous to workmen employed therein and the following precautions must be taken to render the equipment reasonably safe for the use of employees:

1. No timbering in either the north or south tunnels shall be removed or reset before concreting, except in such special instances and under such conditions as the representative of the Industrial Accident Commission or the Commission may authorize.

And the Legal Department and/or any employee of the Commission are hereby authorized to attach notice of said prohibition to said equipment and to institute any civil or criminal proceedings in the Courts which may be necessary to adequately enforce this order.

[Seal] (Signed) T. A. REARDON

Commissioner

(Signed) FRANK C. MacDONALD

Commissioner

Dated at San Francisco, California, this 24th day of September, 1935.

[Endorsed]: Received Sept. 25, 1935. Joint Highway Dist. No. 13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. VVV. Filed April 28, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

Gentlemen, will it be stipulated in connection with this order that both parties to the hearing received notice in advance of the hearing of the order to show cause and that both sides were represented at the hearing?

Mr. Marrin: It is so stipulated.

Mr. Tinning: Q. Mr. Bechtel, do you remember appearing at a meeting of the Board of Directors of Joint Highway District No. 13 on the 5th day of October, 1935, at which time, among other things, a request was presented to the Board to permit employment of men during the emergency following the accident 48 hours a week?

A. I remember attending one of your Board meetings in collaboration with or in company with others of our company.

Q. I am going to give you the names—at which time, accompanying you, was an employee of Six Companies, Mr. Waste, and Mr. Otto Peterson, one of the consulting engineers? A. Yes.

Q. And at which time the directors of the District, Henry L. Hinman, Harry M. Stow, and Thomas E. Caldecott were present and in session as the Board of Directors of the District, William B. Boggs, District Engineer, and Mr. C. H. Sweetser, District Engineer of the [1197] United States Bureau of Public Roads in San Francisco, and myself, were present? A. I believe so.

Q. And at that time, Mr. Bechtel, did you make a statement in substance and effect as follows to

(Testimony of Stephen Davidson Bechtel.)

the Board of Directors, that you felt that the contractor was under no legal obligation to continue to perform its contract, but that due to the fact that a number of the persons who owned interests in the Six Companies of California lived in the Bay Region, that there was a moral obligation on the part of the contractor to do the work, although the contractor had been advised by its attorneys that due to lack of knowledge of the conditions found in the excavation, which were worse than had been anticipated, that the plans and specifications and geological report constituted constructive fraud. Do you remember making that statement, in substance and effect?

A. In substance and effect. I do not remember the words "constructive fraud," but that might have been—I don't remember those words; the other part of it I do remember in substance.

Q. And that by reason of the situation the contractor would be permitted legally to withdraw from the work and recover 100 per cent. of the cost of the work performed; that the contractor intended to proceed with the work, and that large claims, running into a million or two million dollars would be pressed by the contractor against the district?

A. I think so.

Q. Did you then and at that time further state, in substance and effect, that you considered it was the duty of the District to redesign the tunnel lining to meet the conditions which you claimed were unanticipated? A. I think so.

(Testimony of Stephen Davidson Bechtel.)

Q. And were you advised then and there at that time that the district had given consideration to the claims with respect to the design and that it had heretofore advised you it was satisfied, and had advised you that the plans were proper and that the plans [1198] and specifications were clear, and that it was considered the duty of the contractor to proceed in accordance with the contract?

A. Yes, and in explanation of that, or I believe it is interesting to note that we had been held in an ante-room for some 30 or 45 minutes while you and your board met, and apparently reviewed prior to our discussion the entire matter; when we were ushered in you substantially did all the talking; nothing of any significance at all was said by any members of the Board of Directors, and this statement just made was made by you in speaking apparently for the Board. I think that is correct.

Q. But what I have asked you—

A. I answered yes, Mr. Tinning.

Q. And it is true that at that time, Mr. Beehtel, the District, and shortly following the time that you brought the consultants upon the work, had had consulting engineers? A. Yes.

Q. And you knew that they had been in conference with the people you had brought there, and on the second of September, by the letter from the District to Six Companies your contention specified in the letters of August 23 and August 28, with respect to the design, had been replied to, and you

(Testimony of Stephen Davidson Bechtel.)

had been told the District was satisfied that the design was correct, and that you should proceed under your contract? A. Yes.

Q. And you were again bringing this up on October 5? A. Yes.

Q. And during that time you had been proceeding, the Six Companies had been proceeding with the work in the tunnel? At this particular time you were not driving, you were making safe the conditions inside of the tunnel in the sense of placing additional timbers, I think it was called a safety set, or bracing to hold the timbers; you were also working vigorously on removing the place where the slide had occurred, wedging up the ground by the placing of timbers, and proceeding with all of that work during the month of September and on to October, until it was completed?

A. We proceeded to [1199] remove the caved-in section and concreted same; we also proceeded to do other work that was necessary to save the remainder of the tunnel.

Q. Which included placing concrete under the modified section, which also included the placing of concrete where the timbers had not intruded materially, or could be trimmed so that you could place the standard section without resetting timbers, and proceeded to patch up the concrete as far as possible?

A. Well, I do not think the modified section had been formally approved at that time, and it was

(Testimony of Stephen Davidson Bechtel.)
poured as rapidly and as expeditiously and as practically as possible.

Q. I am referring to the modified section, of course, after you had authority to go forward. Before that time any concrete that was placed in the tunnel was placed in accordance with the standard A section design?

Mr. Marrin: I do not think that statement is correct. It was not formally approved until November 8th, by Wallace Boggs. You are speaking about October 5th.

Mr. Tinning: I am talking about approval and I think the fact is that immediately following, or on October 2nd, that Mr. Sweetser authorized the work to go ahead under the modified section, subject to formal approval from Washington, which was received later, and our records show that the modified section commenced immediately following that date.

Mr. Marrin: The company proceeded to place the modified section immediately following the order of the Industrial Accident Commission; at this time it was not issued; it gave no formal approval until November 8, 1935.

Mr. Tinning: We will go into that later. We will prove that the approval was given and they were authorized by Mr. Sweetser to proceed at a meeting at his office, which I think was held on [1200] October 2 or 3.

Q. At any rate, you went ahead and the modi-

(Testimony of Stephen Davidson Bechtel.)

fied section was being placed about that time, and following the order of the Commission. If your Honor please, I offer in evidence regulations of P. W. A. Administrative Order 54, No. P. W. 40444, Federal Emergency Administration of Public Works, August 29, 1935, together with a letter from Thomas H. MacDonald, Chief of Bureau of Public Roads, at Washington, D. C., dated February 4, 1936, Memorandum to all District Engineers, and a letter dated March 4, 1936, from Mr. C. H. Sweetser, District Engineer, to Wallace B. Boggs, District Engineer, Joint Highway District No. 13 of the State of California, and ask that it be admitted in evidence as Defendant's Exhibit in proper order.

Mr. Marrin: If your Honor please, we object to the admission in evidence of this document. This appears to be a letter attaching a general circular with reference to liquidated damages, which was issued by the P. W. A. I want to point out to the Court that there is not a word in the contract between the plaintiff and the defendant here, respecting any authority of the P. W. A. over the granting of extensions of time or the imposition of liquidated damages. There is nothing in the contract that states that the District must secure the consent of the P. W. A. or the State of California, or any other body in order to grant an extension of time. This is a letter which was written nearly two years after the contract was entered into. And if

(Testimony of Stephen Davidson Bechtel.)

it is the contention of the defendant in this case that this is in any way binding on the plaintiff we object to its admission most strenuously on the ground that it is immaterial, irrelevant, and incompetent, and an attempt to alter and vary the terms of a written contract by a communication between this defendant and a third person. [1201]

Mr. Alexander: The surety companies make the same objection.

Mr. Wittschen: Counsel is mistaken when he says that there is nothing in the agreement between the parties that touches upon this. They expressly agreed, and I will read the section, to be bound by any orders that were promulgated by the P. W. A. We are not so much interested in the letter which accompanied it; that is a mere detail. We are interested in the ruling that was made by the P. W. A. authorities. The first thing that I want to call your Honor's attention to is the language of the agreement, itself, and if your Honor will bear with me a moment I will connect that up with the testimony of the witness. The District sent out a set of plans and specifications before this P. W. A. grant was allowed. As soon as that grant was allowed there was set up a supplemental set of specifications which supplemented the previous set. On these the plaintiff bid. The plaintiff has put in evidence as Plaintiff's Exhibit 7 the supplemental plans and specifications. This witness has testified repeatedly in connection with the limitation of plans and mak-

(Testimony of Stephen Davidson Bechtel.)

ing changes as to working conditions that he knew that the P. W. A. authority had to be obtained. If you will recall this witness' testimony of yesterday he said that he sought Mr. Boggs' aid in order to get Mr. Boggs to alleviate a restriction that you could only work 30 hours in one week. The witness also testified that the District stated it would try to get it lifted, and it made application for elimination of the provision that you could not work on Sundays and holidays, and all through this witness' testimony he has recognized that the P. W. A. was interested to the extent of one million dollars or more on this job. To say that is not binding is ridiculous, in view of their own agreement, which I am going to read now from page 4 of the supplemental specification, which states, in so far as material, "A grant of 30 per cent. of the cost of labor and materials used in the pro- [1262] ject of the District has been made by the Public Works Administration of the United States under the terms of said National Industrial Recovery Act, and all bidders are hereby advised that the Directors of the District will cooperate with the Public Works Administration and all its officers and employees in the enforcement of all of the provisions of said National Industrial Recovery Act, and rules and regulations heretofore and hereafter promulgated applicable to the performance of the work on the project of the District."

(Testimony of Stephen Davidson Bechtel.)

Now, in August, 1935, not two years after, but fourteen months after the contract was made, and when this contract had still ten months to run they promulgated a formal order, which I won't read, but which I will summarize to the effect that if the contract was not finished on time and the parties to whom the grant was made did not exact or waived the penalty clause because of failure to complete the contract on time, they did it in effect at their risk, because if the Government did not thereafter approve of this extension that then the amount so waived would be deducted from the amount that the Government otherwise would give to the party under the grant, or to state the matter in a different way, if the District did not exact this penalty when the penalty became due, then the Government, if it saw fit, could reduce the amount of grant by the amount of penalties waived. That is an order made by a body that was part of the work, where there were supplemental specifications specially made applicable to the subject, it was a ruling by the Federal authorities, and it was just as much binding on the contractor as it was binding on us. It is certainly legitimate evidence in view of this witness' testimony that he understood that these things could only be waived by the Government, and your Honor will recall further that the State [1203] gave them a 48-hour week but the Government insisted on a 40-hour week, so they had to take a 40-hour week. The Government had

(Testimony of Stephen Davidson Bechtel.)

control of the hours, and if they had control as to the hours they certainly had control as to whether or not a provision in the contract could be waived. Your Honor will also recall in connection with the modified section nothing was done until the P. W. A. said that they consented to it, because they were a party to the agreement; they were not signatories to the agreement, but they put up a million out of some three million of the amount, so you see that their rules and regulations would have to be complied with.

The Court: What is this agreement you are reading from?

Mr. Wittschen: This is a copy of the specifications which the plaintiff put in.

The Court: For the purpose of the record, what is the purpose of this offer?

Mr. Wittschen: The purpose of this offer is to show that the ruling was made prior to the rescission of the contract requiring the district to withhold penalties, and have that matter adjusted at the completion of the work, and not to waive them during the construction.

Mr. Marrin: Now, if your Honor please, in the first place this plaintiff was not a party to the agreement between the District and the P. W. A. with respect to the finances or any part of it, it had never seen it; it does not refer to this contract and is not made a part of the contract. Mr. Wittschen has referred to a certain section in the

(Testimony of Stephen Davidson Bechtel.)

supplement to the specifications which he has read to your Honor, and those provisions, we submit, relate entirely to the conditions surrounding the employment of labor. They relate to the number of hours that the men may be worked on the project per day and per week, and the wages that must be paid; [1264] and to say that you can extend that provision and give it the meaning that a letter from the P. W. A. can change any of the essential terms of the contract is giving it a meaning entirely beyond what was ever intended. The provisions in the contract and the specifications regarding extension of time are very clear. They are short and I might just read this portion. It says:

“The time during which the contractor is delayed in said work by Acts of God, or by stormy or inclement weather, or by any reason which, in the judgment of the District Engineer, unavoidably delays the work, shall be added to the aforesaid time for completion, provided that the Board of Directors approve in advance the written application therefor, which must be made by the contractor for such an extension, before the expiration of the time limit fixed herein, or a duly granted extension thereof.”

The effect of this letter from the P. W. A. is to state to the District that if they do not collect liquidated damages when the P. W. A. thinks they

(Testimony of Stephen Davidson Bechtel.)

should have collected them, then that amount would be deducted from the grant. Now, I submit to your Honor that that does not constitute itself any justification for denying an extension of time when the contractor was entitled to it under the terms of the contract, and I submit further that this so-called amendment to the specifications does not have the meaning which the defendant attempts to give it.

The Court: I am prepared to rule.

Mr. Wittschen: I just want to make one observation. It is not the letter we are introducing. I do not want your Honor to be confused. We are introducing an order which was made by the Assistant Administrator, acting for the Administrator, which was not promulgated as to this job, but as to all jobs in which the P. W. A. is interested, pending all over the United States. It is not a [1205] letter, counsel is misconstruing that, and these specifications that I have read do not refer only to employment of labor, they refer to all rulings of the P. W. A., and to say that the P. W. A. is not a party to this contract in view of the close relation they have had all the way through—you could not even drop a timber ten inches without their consent—is carrying the argument too far. It is an act of an executive branch of the Government of which the Court takes judicial notice.

The Court: The Court is prepared to rule. I am going to allow it to be admitted, subject to a motion

(Testimony of Stephen Davidson Bechtel.)
to strike, and over the objection of counsel, so that you can take it up at some future time and discuss it at length.

Mr. Marrin: Note an exception.

Mr. Alexander: We also note an exception.

Mr. Marrin: I would like to have the further ground of objection that it is not proper cross-examination of this witness.

Mr. Alexander: We join in the additional objection.

Mr. Tinning: Now, under the order that is made, do you wish us to offer all of these documents, or simply the matter the Court ruled on?

Mr. Marrin: I think they should all go in.

Mr. Wittschen: We are only interested in the order.

Mr. Smith: It shows on the face of it we did not get it until March, 1936.

Mr. Tinning: That is correct. We did not exact the penalty until June, 1936. The offer has been made and objected to, and admitted, and I offer it as Exhibit WWW.

(The document was marked "Defendant's Exhibit WWW.")

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT WWW.

United States Department of Agriculture
Bureau of Public Roads, District No. 2
461 Market Street, San Francisco, Calif.

March 4, 1936

In your reply please refer to
File: 483 Calif. 2231

Mr. Wallace B. Boggs, District Engineer
Joint Highway District No. 13
1448 Webster Street
Oakland, California.

Dear Sir:

I am enclosing a copy of Memorandum to all District Engineers, dated February 4, 1936 to which is attached Administrative Order No. 54 (Supplemental) of the Federal Emergency Administration of Public Works.

This order has to do with the procedure governing liquidated damages. For projects under the administration of the Bureau of Public Roads, the title "State Director" shall be interpreted to mean "District Engineer, U. S. Bureau of Public Roads."

Yours very truly,

(Signed) C. H. SWEETSER

Enc.

District Engineer.

United States Department of Agriculture
Bureau of Public Roads, Washington, D. C.

February 4, 1936

**MEMORANDUM TO ALL DISTRICT
ENGINEERS.**

We are enclosing copies of Administrative Order No. 54 (Supplement 1) of the Federal Emergency Administration of Public Works.

This order applies to projects transferred to this Bureau by the Public Works Administration.

In the administration of PWA dockets by this Bureau, the same procedure governing liquidated damages as is now in effect under the Bureau's regulations will be followed.

THOS. H. MacDONALD

Chief of Bureau.

Enclosure.

P. W. 40444

Federal Emergency Administration of
Public Works

August 29, 1935

Administrative Order No. 54 (Supplement 1)

**SUBJECT: CONSTRUCTION CONTRACTS,
LIQUIDATED DAMAGES ON**

This Administration has adopted the policy of deducting from the grant base the sum equal to the liquidated damages which the borrower or grantee could have assessed against the con-

(Testimony of Stephen Davidson Bechtel.)

tractor or contractos for delay in completion, pursuant to the terms of the construction contracts, but which the borrower or grantee failed to deduct for reasons which this Administration considers inadequate.

Therefore, in order to expedite final payment of the grant, the following procedure shall be followed where a construction contract provides for liquidated damages.

As to those contracts which have not yet been completed, the State Directors shall ascertain, if possible, prior to the expiration of the time limit fixed in the contract, whether additional time will be required to complete the contract, and, if so, whether the borrower or grantee intends to waive liquidated damages, and, if so, its reasons therefor. In the event that the borrower proposes to waive such damages, the State Director should forward such information to Washington with all pertinent data, his recommendation and supporting information as to whether an extension of time should be allowed the contractor.

If, on contracts which have been completed, the borrower or grantee has already waived liquidated damages, the State Director shall require the borrower or grantee to furnish him with its reasons for such action and shall transmit such information to the Central Office with

(Testimony of Stephen Davidson Bechtel.)

all pertinent facts and his recommendation to the action taken.

After review of the information submitted pursuant to this order, the State Director will be advised of the approval or disapproval of the Central Office of the proposed action or of the action taken, as the case may be.

(Signed) HORATIO B. HACKETT

Assistant Administrator.

Engineering

Distribution:

General

[Endorsed]: Received March 7, 1936. J. H. D. #13.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. WWW. Filed April 28, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

If your Honor please, the defendant offers in evidence and suggests that they be received as one exhibit, Estimates Nos. 1 [1206] to No. 23, engineering estimates upon which monthly progress payments were made, commencing with No. 1, which was issued for the period from June 4 to June 30, 1934, and closing with Estimate No. 23, which was issued for the period from April 1, 1936 to April 30, 1936. We ask that these be admitted as one exhibit.

(Testimony of Stephen Davidson Bechtel.)

The Court: Let them be admitted and marked.

(The estimates were marked "Defendant's Exhibit XXX.")

[Set forth in the Book of Exhibits at page 435.]

Mr. Tinning: Defendant now offers in evidence Estimate No. 24 covering the period from May 1 to May 31, 1936, accompanied by a copy of the letter transmitting the estimates and a photostatic copy of the check from the District to the Six Companies of California, Check No. 1934, dated June 10, 1936, for \$148,586.98. This check was sent to the Six Companies with the estimate referred to and, gentlemen, so that there will be no mistake, I call your attention to some writing that appears on the face of the photostatic copy of the check, which was made recently, "Cancelled, Board of Directors, May 31, 1937," and similar endorsements have been put on the check that went in July to the Six Companies, because it was necessary for the District to cancel these checks, as the evidence will show, and they were returned to the District.

Mr. Wittschen: Will it be stipulated that when they were sent they were not marked "Cancelled," and they were only cancelled after you returned them?

Mr. Marrin: It will be stipulated that when these checks were received by the Six Companies that writing was not upon them.

Mr. Tinning: We offer this Estimate No. 24 and

(Testimony of Stephen Davidson Bechtel.)
the check, and the copy of the letter as Defendant's Exhibit YYY.

(The estimate was marked "Defendant's Exhibit YYY.")

[Set forth in the Book of Exhibits at page 458.]

[1207]

Mr. Tinning: We offer in evidence, if your Honor please, as Defendant's Exhibit in proper order, a letter from Six Companies of California, signed by Henry J. Kaiser, President, to Joint Highway District No. 13 of the State of California, and dated June 13, 1936, and ask that it be marked in evidence Defendant's Exhibit ZZZ. It reads:

[1208]

DEFENDANT'S EXHIBIT ZZZ.

Builders of Broadway Low Level Tunnel
Six Companies of California
1522 Latham Square Building
Oakland, California
Highgate 6334

June 13, 1936

Joint Highway District No. 13
of The State of California,
1448 Webster Street,
Oakland, California.

Gentlemen:

You are hereby notified that the undersigned,
Six Companies of California, has elected to

(Testimony of Stephen Davidson Bechtel.)

and does hereby terminate and rescind the contract dated June 4, 1934, between the undersigned and your District for the construction, erection and completion of the project of said Joint Highway District No. 13 of the State of California, which includes a highway, highway tunnels, and approaches with the appurtenant structures located partly in the City of Oakland, County of Alameda, State of California, and partly in the County of Contra Costa, State of California, commonly known as the Broadway Tunnel Project.

Said rescission is made upon the following grounds and each and all of them:

First: Through your fault the consideration for our obligations under said contract has failed in part in that you have failed and refused to pay us the amount estimated by you to be due us under the monthly estimate for work done during the month of May, 1936. Said failure consists in the deduction by you from the amount estimated by you to be due us for such work of the sum of \$3,500 for claimed damages for failure to complete the work under said contract, said deduction being computed at the rate of \$500 per day for each day in May 1936 following May 24th, and to and including the 31st day of May, and including such a deduction for a legal holiday, May 30, and a non-working day, Sunday, May 31st. Said deduc-

(Testimony of Stephen Davidson Bechtel.)

tion was and is contrary to and in violation of the terms of the contract in that we were and are entitled as a matter of right and of law to an extension of time thereunder for performance of same to a date after May 31, 1936; and was and is further in violation of the provisions of the said contract in that any damages for delay in completion of the contract can only be asserted or claimed against the contractor for working days after the contract date for completion.

Second: That the consideration for said contract has failed in a material respect in that you have breached said contract by refusing to pay us the amount due us under your monthly estimate for work done during the month of May, 1936. Said failure consists in the deduction by you from the amount due us for such work of the sum of \$3,500 for claimed damages for failure to complete the work under said contract within contract time, said deduction being computed at the rate of \$500 per day for each day in May, 1936 following May 24th, and to and including the 31st day of May, and including such a deduction for a legal holiday, May 30th, and a non-working day, Sunday May 31st. Said deduction was and is contrary to and in violation of the terms of the contract in that we were and are entitled as a matter of right and of law to an extension of time thereunder

(Testimony of Stephen Davidson Bechtel.)

for performance of same to a date after May 31, 1936; and was and is further in violation of the provisions of the said contract in that any damages for delay in completion of the contract can only be asserted or claimed against the contractor for working days after the contract date for completion.

Third: That in failing to pay said sum mentioned in numbered paragraphs First and Second above and by your refusal to grant said extension of time you have breached said contract, and ground for rescission has arisen in our favor.

Fourth: That your failure and refusal to grant us the extensions of time to which we are entitled as a matter of right and of law for completion of said contract after May 24, 1936, although we have repeatedly requested the grant of such extensions is a breach of the contract.

Fifth. Because the ground encountered in the excavation for the tunnels provided for in the contract has been and is entirely and radically different from the character of ground represented to the contractor as that which would be encountered, and which was contemplated and predicted by the contract, geological report, specifications, plans and any and all other documents forming a portion or part thereof.

Sixth: For your failure and refusal to furnish points, lines and grades for us to work to

(Testimony of Stephen Davidson Bechtel.)

and other engineering work in the construction of the tunnels as is required to be done or furnished by you by the terms and provisions of the contract and specifications forming a part thereof.

Seventh: Because the work which is necessarily required to be done to construct the tunnels under the ground conditions actually encountered at their site is not provided for in the contract and was not contemplated by the parties at the time the contract was made.

Eighth: For any and all other grounds of rescission of said contract of June 4, 1934 which may have heretofore existed or which do now exist in favor of the undersigned.

We are returning herewith to you your check #1934 dated June 10, 1936 in purported payment of the estimate for the work done by us during the month of May, 1936.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA

By (Signed) HENRY J. KAISER

President.

[Endorsed]: Received June 15, 1936. Joint Highway Dist. No. 13. Personally handed to me at 9:40 a. m. June 15, 1936. Wallace B. Boggs.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. ZZZ. Filed April 28, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

I think it may be stipulated that this letter of rescission was personally delivered to Wallace B. Boggs, at 9:40 a. m., on June 15, 1936, and that also a letter was mailed on June 13, the date that this letter bears, which contained a copy of this same letter, a duplicate original, we may call it, and it was received by mail by the District on June 15, 1936.

Mr. Marrin: That will be stipulated to, and will it be stipulated that the check which was introduced as a part of Defendant's Exhibit YYY was returned to the District?

Mr. Tinning: As stated in the letter and received by the District with this letter.

Mr. Marrin: And subsequently cancelled?

Mr. Tinning: And subsequently cancelled. I want the stipulation with respect to the cancellation, that it was cancelled on the 31st of May, 1937, more than one year afterward.

Mr. Marrin: Yes. I just wanted it clearly stipulated that the check was never paid by the District.

Mr. Tinning: I would like to offer in evidence as Defendant's Exhibit A-4 a letter dated June 15, 1936, signed by Six Companies of California, Henry J. Kaiser, President, addressed to the District. It reads as follows: [1211]

1420

Six Companies of California vs.

(Testimony of Stephen Davidson Bechtel.)

DEFENDANT'S EXHIBIT A-4.

Builders of Broadway Low Level Tunnel
Six Companies of California
1522 Latham Square Building
Oakland, California
Highgate 6334

June 15, 1936

Joint Highway District No. 13
Of The State of California,
1448 Webster Street,
Oakland, California.

Gentlemen:

Having rescinded our contract with you dated June 4, 1934, for the reasons heretofore stated in a notice of rescission dated June 13, 1936, and heretofore delivered to you, we have ceased all operations under said contract.

In order to protect temporarily the work which has been done, and for that purpose only, we are continuing to operate the pumps and keep watchmen at the site for a sufficient time to enable you to take over these operations.

You are notified that, except for such watchmen as are necessary to protect our own property, we will remove all our employees from the site of the work, including those operating the pumps and watching your property, at midnight Tuesday June 16, 1936. If you desire the pumps operated and the property guarded after that time you must arrange to carry on this

(Testimony of Stephen Davidson Bechtel.)

work with your own employees and solely at
your own cost and risk.

Very truly yours,

SIX COMPANIES OF
CALIFORNIA

By (Signed) HENRY J. KAISER

President.

[Endorsed]: Received June 15, 1936. Joint Highway Dist. No. 13. By Received 2:35 p. m. Wallace B. Boggs.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. A-4. Filed April 28, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit A-4.")

The Court: We will take a recess for a few minutes.

(After recess):

Mr. Tinning: Q. Mr. Bechtel, if I understood your testimony on direct you ceased to be president of Six Companies, the plaintiff in this case, on or about the 29th of February, 1936? A. Yes.

Q. That was a few days following the slide that occurred on the 22nd, or the cave-in that occurred on the 22nd of February, 1936? A. Yes.

(Testimony of Stephen Davidson Bechtel.)

Q. And after that time Mr. Kaiser became president and continued as president of the company? A. Yes.

Q. You were connected with the company thereafter, were you not?

A. I continued to be a director.

Q. Were you out around the work after that time? A. Not a great [1212] deal.

Q. In other words, you were not as closely connected with the work after that as you had been when president of the company?

A. That is correct.

Q. Don't you know as a matter of fact that every day in May of 1936 after May 24th that Six Companies' men worked on the work driving the Broadway Low Level Tunnel up till and including June 1, both Sunday and Memorial Day?

A. No, except as hearsay.

Q. You do not question it as a fact that the records of the company show that the men were working, full crews, on those days?

A. I do not question that they were working, but as far as my personal knowledge goes, or having examined the records, I do not know, but I presume they did work.

Mr. Tinning: You will stipulate, gentlemen, will you not, that the men and crews actually worked on Memorial Day, May 30, 1936, and on Sunday, May 31?

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: I think so, but we will have to check the records on that.

Mr. Tinning: I did not want to waste time on that if we could avoid it. I am positive they did.

The Court: It may be stipulated subject to correction after examination of the records.

Mr. Tinning: It is stipulated subject to correction?

Mr. Marrin: That the men did work?

Mr. Tinning: Yes.

Mr. Marrin: Yes.

Mr. Tinning: Q. Mr. Bechtel, from these letters that were written here it appears that on June 13 notice of rescission was actually sent out, and as a matter of fact that was Saturday night, was it not? A. I do not recall.

Q. Weren't you present at a meeting of the Board of Directors at [1213] which the action of the Six Companies was decided upon, and to serve this notice of rescission?

A. If there was a meeting of the Board of Directors so held then, and I believe such a meeting of the Board of Directors was held, but so far as being at any meeting on any Saturday night, I do not think any meeting was held, and if so I was not there.

Q. I was not there, but I understand that there was a meeting held of the Board of Directors of Six Companies, of which you were a member, on the 13th day of June, 1936, the day that the notice

(Testimony of Stephen Davidson Bechtel.)
of rescission was given. Were you present at that meeting?

A. In June, and about that time, a meeting was held; as to the time, place and day I am not clear on right now. I will check the records on that.

Q. Mr. Bechtel, do you mean to say that you have not any recollection of the meeting at which the action was taken by the Board of Directors?

A. I said I attended such a meeting, but the time and place I do not remember.

Q. Wasn't it the same day that this rescission notice was given?

A. I don't know whether it was or not.

Q. Isn't it a fact that the meeting started sometime in the day and continued through the afternoon and evening till sometime around ten o'clock at night? A. I have no such recollection.

Q. You have no such recollection?

A. No.

Q. Were you present in the room of the directors when Mr. Paul St. Sure, one of your attorneys, telephoned to me at 10:45 P. M. on June 13 and said he was closing down the job at 11 o'clock?

A. I have no such recollection.

Q. You did not have that in mind when you testified yesterday you were driven off the work?

A. The telephone conversation?

Q. Yes.

A. As I say, I do not recall any such telephone conversation. [1214]

(Testimony of Stephen Davidson Bechtel.)

Q. You did not have in mind the action of Six Companies in ceasing work occurring at 10:45 p. m. on the night of June 13, 1936?

A. The comment I made that we were driven off the work came to my mind because of the action of the District in deducting or penalizing us for not having completed in accordance with the original date of the contract, and after we had been assured or told that we were entitled to an extension of time, and when you assessed these penalties, in my mind, it was a breach of faith; it was not in accordance with the understanding or the thought or the assurance which I felt we had been given, and which in turn I had reflected up to that time to our board of directors, that we had been told that we were entitled to an extension of time, it was just a question of when and the amount.

Q. You were a member of the directors in May, 1936? A. Yes.

Q. You were a member of the Board of Directors at that time when you applied for an extension of time of 600 days, were you?

A. I have been a director of Six Companies of California since its inception, or since May 15, 1934, up to and including to-day.

Q. You had cognizance of the fact that on May 8, 1936, Six Companies applied for a 600-day extension of time?

A. No, I did not. As a matter of fact, until recently here I did not know that an application had

(Testimony of Stephen Davidson Bechtel.)

been made to the extent of 600 days, and I understood that such application was to be made, and an application was being made by Mr. Kaiser, that was a matter which had been referred to Mr. Kaiser for handling by the Board of Directors, and Mr. Kaiser kept the Board of Directors generally informed of the important matters.

Q. You knew then, following May 8th, and on May 14, that the District had denied your application? A. No, I did not.

Q. You did not? A. No.

Q. So when you attended the meeting on June 13 and you knew that [1215] a penalty had been assessed you did not know that the application for 600 days extension of time had been denied a month before?

A. I knew that an application had been made, I was told that at some period in between those dates, I do not recall the exact date, that an application had been made and the application had been denied; I did not know the extent or the days involved.

Q. Did you know that after the application was denied that Six Companies made any request of the District to waive the penalty or to await the determination as to whether or not the penalty would be waived until the job was completed?

A. No, I did not know that, and I do not know it now.

(Testimony of Stephen Davidson Bechtel.)

Q. You don't know whether it ever happened?

A. I don't know whether it ever happened. The matter was handled by Mr. Kaiser.

Q. Did he ever report to you as a member of the Board of Directors that he had communicated or written and asked them to waive the matter of imposing the penalty until the job was done, when it might be fought out or threshed out and determined?

A. I knew of no such communication but it might have taken place.

Q. You don't know that?

A. I don't know that.

Q. As a matter of fact, it never took place?

A. I don't know that it took place or not.

Q. Now, it is a fact that the work was shut down at 11 p. m. on the night of June 13, 1936, is it not? A. I understand that.

Q. On Saturday night, and that the warning of shut-down was just fifteen minutes of notice was given to me by Mr. St. Sure, one of your attorneys?

A. I don't know that.

Q. You don't know that? A. No.

Q. You don't doubt it, do you?

A. If you say it is so it must be.

Q. And we got the letter of rescission on Monday morning, the 15th of June, 1936?

A. You so testified this morning.

Q. You have been following the testimony very closely. [1216]

(Testimony of Stephen Davidson Bechtel.)

We offer in evidence as Defendant's Exhibit B-4 a letter dated June 16, 1936, addressed by Joint Highway District 13 to Six Companies of California, and ask that the letter be admitted in evidence. It reads as follows: [1217]

DEFENDANT'S EXHIBIT B-4.

June 16, 1936

Six Companies of California
1522 Latham Square Building
Oakland, California

Gentlemen:

Your letter of June 13, 1936 in which you notified this District of a purported termination and rescission of your contract with this District dated June 4, 1934, has been received and considered by the Board of Directors of the District, and this reply thereto is made at the direction of the Directors of the District.

You are hereby advised that Joint Highway District No. 13 of the State of California considers all of the grounds stated by you as a basis for your attempted rescission and termination of the contract are without basis in fact or law; that this District has fully paid all sums required to be paid, performed and done all things required to be performed and done by it under the said contract, and that you, as such contractor, have no valid grounds

(Testimony of Stephen Davidson Bechtel.)

or reason whatsoever for your attempted rescission and termination of the contract.

You are advised that your cessation of work upon the project and your withdrawal of workmen from the construction of the project constitutes an abandonment by you of the work to be done under the contract; that your said acts which unnecessarily and unreasonably delay and continue to delay the work you contracted to perform, and your attempted rescission and termination of the contract, and each and all of them, constitute wilfull breaches of the contract by you.

You are further advised that unless you as said contractor resume work on the project and perform the same in accordance with all of the terms thereof within three (3) days of the date of your receipt of this letter, that this District will consider your acts and conduct as aforesaid a final abandonment of the contract and the work to be done thereunder, and the District will proceed to complete the same in accordance with the provisions of the contract, and that the District will hold you and your bondsmen liable for any and all costs thereof in excess of the contract price and any and all damages to this District by reason of your wilfull abandonment of the work in violation of

the terms of your contract with this District dated June 4, 1934.

Yours very truly,
JOINT HIGHWAY DISTRICT
NO. 13 OF THE STATE OF
CALIFORNIA,

By (Signed) L. V. EATON

Assistant Secretary

cc to all bonding companies

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. No. B-4. Filed April 28, 1938. Walter B. Maling, Clerk. By J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit B-4.")

Gentlemen, will it be stipulated that a similar letter was sent by the District to all of the sixteen bonding companies which were sureties on the bond in this matter under date of June 16, 1936?

Mr. Alexander: That is the fact.

Mr. Tinning: And that said letter was received by all of the bonding companies? We have a return receipt to that effect.

Mr. Alexander: Yes, it is stipulated that a copy of the letter that you wrote was sent to the sixteen surety companies and received by them.

Mr. Tinning: And also the copy was accompanied by this letter?

Mr. Alexander: So stipulated.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: The letter which was sent to all of the bonding companies, which it has been stipulated was received, we will ask [1218] to be introduced and marked as Defendant's Exhibit C-4. It reads as follows: [1219]

DEFENDANT'S EXHIBIT C-4

June 16, 1936

Hartford Accident and Indemnity Co.,
720 California Street,
San Francisco, California,

Gentlemen:

Enclosed herewith please find a copy of a letter addressed to the Six Companies of California, contractor under the contract dated June 4, 1934, with this District, which is sent you that you as one of the co-sureties on the bond securing materialmen and laborers and the bond for faithful performance furnished with and forming a part of the said contracts, may as such surety be advised of an attempted rescission and termination of the contract and work thereunder by the contractor, Six Companies of California, and of the fact that this District considers said action an abandonment of the work by the contractor.

You will please advise this District if you and the other co-sureties under said bonds elect to proceed with the completion of the work

(Testimony of Stephen Davidson Bechtel.)

which the contractor is attempting to repudiate, and if you do not advise this District within three (3) days of the date of your receipt of this letter that the bondsmen intend to perform the remainder of the work under the terms of the contract, the District will proceed to perform the work and pay for the same in accordance with the terms of the contract, holding the contractor and all of the sureties on said bonds liable for any cost in excess of the contract price, and any and all damages to the District by reason of the wilfull abandonment of the work by the contractor and its failure to perform the same, and from any and all other causes proper under the contract.

Yours very truly,

JOINT HIGHWAY DISTRICT
NO. 13 OF THE STATE OF
CALIFORNIA,

By L. V. EATON,

Assistant Secretary.

(Identical letter addressed to each bonding company.)

(Testimony of Stephen Davidson Bechtel.)

<u>Name of Surety</u>	<u>Percentage of Liability</u>	<u>Amount of Liability</u>
Hartford Accident and Indemnity Company, a Connecticut Corporation.....	10%	\$184,200.00
Fidelity and Deposit Company of Maryland, a Maryland Corporation.....	10%	184,200.00
The Aetna Casualty and Surety Company, a Connecticut Corporation.....	10%	184,200.00
Indemnity Insurance Company of North America, a Pennsylvania Corporation.....	10%	184,200.00
American Surety Company, a New York Corporation.....	10%	184,200.00
Fireman's Fund Indemnity Company, a California Corporation.....	7%	128,940.00
Maryland Casualty Company, a Maryland Corporation.....	6½%	119,730.00
United States Fidelity and Guaranty Company, a Maryland Corporation.....	6½%	119,730.00
Fidelity and Casualty Company of New York, a New York Corporation.....	5%	92,100.00
Glens Falls Indemnity Company, a New York Corporation.....	4½%	82,890.00
Standard Surety and Casualty Company of New York, a New York Corporation.....	4%	73,680.00
Standard Accident Insurance Company, a Michigan Corporation.....	4%	73,680.00
Pacific Indemnity Company, a California Corporation.....	4%	73,680.00
Massachusetts Bonding and Insurance Company, a Massachusetts Corporation.....	4%	73,680.00
Continental Casualty Company, an Indiana Corporation.....	2½%	46,050.00
New Amsterdam Casualty Company, a New York Corporation.....	2%	36,840.00
TOTAL	100%	1,842,000.00

[Endorsed]: U. S. Dist. Ct., N. D. Cal. No. 20101-R. Deft's Ex. No. C-4. Filed April 28, 1938. Walter B. Maling, Clerk, by J. A. Schaertzer, Deputy Clerk.

(Testimony of Stephen Davidson Bechtel.)

(The letter was marked "Defendant's Exhibit C-4.")

Now, gentlemen, will it be stipulated on the part of counsel for plaintiff, the Six Companies, that they did not return to work within three days or any other time?

Mr. Marrin: It is so stipulated.

Mr. Tinning: And on behalf of the surety companies, Mr. Alexander, will it be stipulated that following the receipt of this notice none of the surety companies took over the work and proceeded with the completion of the work?

Mr. Alexander: So stipulated.

Mr. Tinning: Defendant offers in evidence a letter dated July 9, 1936, addressed to Six Companies of California, together with Estimate No. 25 of the District Engineer, covering the work from June 1, 1936, to June 13, 1936, the estimate having been filed or issued as of July 9, 1936, together with a check of the district in payment of the amount of the Engineer's Estimate for the work during the period from June 1 to June 13, 1936, the check being numbered 2201 of the District, and being for the sum of \$80,715.66, and covering the Engineer's Estimate which deducted the penalty of \$500 a day for the thirteen days in June, which the contractor worked. We offer the letter, the estimate, and the check as one exhibit, D-4.

(The letter was marked "Defendant's Exhibit D-4.")

(Testimony of Stephen Davidson Bechtel.)

Under the terms of the contract, your Honor, the contractor was entitled to payment for the work in the preceding month based upon an engineer's estimate, and the making of progress payments on or about the 10th day of the succeeding month.

The Court: Coupled with the fact that there was a deduction for penalty in this case and in May?

Mr. Tinning: 7 days on May and 13 days in June. [1220]

The letter reads as follows:

[Set forth in the Book of Exhibits at page 461.]

Now, the check accompanying this Exhibit D-4 bears a similar notation that was written upon the face of it thereafter. May it be stipulated that when the check was sent to Six Companies, the plaintiff in this case, that there was no such notation on it?

Mr. Marrin: So stipulated.

Mr. Tinning: And may it also be stipulated, as stated in the letter, that the check which had been first sent to the Six Companies on June 10, 1936, was also included and enclosed and tendered again; in other words, that there was a second tender of the check?

Mr. Marrin: Yes.

Mr. Tinning: Both payments. [1221]

Mr. Marrin: Will it also be stipulated that the District never tendered the amount of \$3500 for May and the amount of \$6500 for June, the deduction penalty?

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: I will stipulate to that, the proof is unequivocal, that they did not.

We offer in evidence a letter dated July 15, 1936, from Six Companies of California, signed by Henry J. Kaiser, President, to Joint Highway District No. 13, which we ask be marked "Defendant's Exhibit E-4. It reads as follows:

DEFENDANT'S EXHIBIT E-4

Builders of Broadway Low Level Tunnel
Six Companies of California,
1522 Latham Square Bldg.,
Oakland, California.

Higate 6334

July 15, 1936

Joint Highway District #13
of the State of California,
1448 Webster Street,
Oakland, Calif.

Gentlemen:

We hereby acknowledge receipt of your check No. 1934 in the amount of \$148,586.98 and also your check No. 2201 in the amount of \$80,715.66 dated June 10, 1936, and July 9, 1936, respectively.

By notice dated June 13, 1936, and heretofore delivered to you, the undersigned rescinded said contract for the reasons and upon the grounds stated in said notice.

(Testimony of Stephen Davidson Bechtel.)

Said checks are hereby returned to you.

Very truly yours,

SIX COMPANIES

OF CALIFORNIA,

By (Signed) **HENRY J. KAISER, Pres.**

By **T. M. PRICE.**

T. M. Price/w

Receipt of the checks described within is hereby acknowledged this 15th day of July, 1936.

JOINT HIGHWAY DISTRICT NO. 13,

By (Signed) **W. B. B.**

[Endorsed]: Received July 15, 1936. Joint Highway Dist. No. 13. 3:45 p. m.

[Endorsed]: U. S. Dist. Ct. N. D. Cal. No. 20101-R. Deft's. Ex. E-4. Filed April 28, 1938. Walter B. Maling, Clerk, by J. A. Schaertzer, Deputy Clerk.

(The letter was marked "Defendant's Exhibit E-4.")

Q. Mr. Bechtel, returning now to your testimony respecting the conversation or statement——

Mr. Marrin: Mr. Tinning, before you go on would you stipulate that the District did not at any time send to the plaintiff in this case any of the letters or documents that have been introduced as Defendant's Exhibit WWW?

Mr. Tinning: That is the P.W.A. letter?

(Testimony of Stephen Davidson Bechtel.)

Mr. Marrin: Yes.

Mr. Tinning: Yes.

Q. As I understood your testimony respecting your conversation with Mr. Boggs during April or May, 1935, or as near as you can place that conversation, it was in that period you testified, April or May, you have not the specific date when it occurred? A. That is right.

Q. You kept no memorandum of the conversation? A. That is right.

Q. Now, Mr. Bechtel, is it not a fact at this conversation which occurred just before the noon hour, at the front steps of Six Companies office, near the west portal, I think you called it the job office, that is what we are referring to, in addition to yourself and Mr. Price and Mr. Boggs, that Prof. Charles Derleth, Jr., of the University of California, one of the District's consultants, was present?

A. That is not correct.

Q. That is not correct? A. No.

Q. Isn't it a fact that you only had one conversation with Mr. Boggs at any time in April or May, 1935?

A. I would not say that is correct.

Q. Have you any memoranda or records that indicate that you had more than one conversation with him during that period? A. No.

Q. Have you got any memorandum of any conversation with Mr. Boggs?

A. Written at the time, do you mean?

(Testimony of Stephen Davidson Bechtel.)

Q. Written at the time. A. No.

Q. Why did you say you are uncertain that you had more than one conversation with Mr. Boggs in April or May, 1935?

A. Because from time to time I was on the job and saw Mr. Boggs there, and at times exchanged pleasantries, and other times discussed the job in generalities, and that is my reason for saying it might have [1223] been the case.

Q. Mr. Bechtel, is it not a fact, and was it not a fact that the conversation that you referred to occurred on May 21, 1935?

A. I don't recall the date.

Q. Do you recall that it occurred shortly before the noon hour?

A. No, I think, on the other hand, it occurred some place probably between 9 and 9:30 or ten o'clock, and the reason I say that is it was my practice or custom usually to leave home sometime between 6:30 and 8:30, and coming to San Francisco via the job, when I was going to the job, and very seldom came out that late.

Q. Then you are fixing the time by reason of your custom and not by any independent recollection of what occurred on the day of the conversation which you testified to?

A. That is correct.

Q. You have no notes made of it at the time?

A. No.

(Testimony of Stephen Davidson Bechtel.)

Q. Isn't it a fact that this conversation occurred, you and Mr. Price were near the job office, and that Prof. Derleth and Mr. Boggs came out of the tunnel just before noon and walked down toward you and met you at the job office?

A. Not this discussion, Mr. Tinning; you might be thinking of some other pleasantries or general conversation, but not this discussion.

Q. I am not talking about any pleasantries, I am talking about conversation.

A. There were pleasantries, but this discussion was held in front of the job office, in front of the steps, in fact, we sat on the front steps a portion of the time; there were only three people there, there was Mr. Tom Price, Mr. Boggs, and myself. Prof. Derleth was not there.

Q. Isn't it a fact at this time and place that this conversation occurred, that the conversation was opened after you greeted them, greetings back and forth by Prof. Derleth telling you that he was very much surprised about your delay in installing concrete lining in the tunnel, the timbers had been standing a long time and that [1224] you ought to get the concrete going as soon as possible?

A. No.

Q. Did he ever tell you that at any time?

A. As you state it, no.

Q. Or in substance and effect?

A. There was a conversation—

(Testimony of Stephen Davidson Bechtel.)

Q. Will you answer "Yes" or "No," and then explain? A. No, not as you stated.

Q. Will you tell us what he did say, and first tell us when?

A. I would place it some place in the month of July, Prof. Derleth and I happened to meet some place on the job, and he commented with the thought the tunnel lining or concrete should be expedited, or as rapidly as possible. I told him that was correct, that was our purpose, and we were proceeding accordingly. That, in substance, was the discussion I had with Prof. Derleth.

Q. This was in July?

A. I think it was some time in July.

Q. It was after the concreting started?

A. That would be approximately correct.

Q. July 2 was when you started pouring the first concrete footings in the tunnel after December, 1934?

A. If you say that was the date, it was during the month of July, you would be correct.

Q. Then was your conversation with Prof. Derleth before you started pouring the concrete in the tunnel or afterward?

A. I would say it was during the month of July.

Q. Would you answer my question?

Mr. Marrin: I think he answered the question perfectly clearly. He fixed the time and fixed the occasion.

(Testimony of Stephen Davidson Bechtel.)

Mr. Tinning: Q. Was the conversation which you had with Prof. Derleth that you have referred to before or after the concrete pouring was started in the tunnel? A. I do not recall.

Q. Did you make any note of that conversation?

A. No.

Q. Isn't it a fact that at the time and place mentioned, May 21, Prof. Derleth also told you that for a long time he had been telling [1225] Six Companies' representative on the job that the concreting should not be delayed, and that he wanted to impress upon you, mentioning you as president of the company, that you should get the concrete lining in at once?

A. I do not think any part of that is correct. I have no recollection of such a conversation, and I do not believe he ever told me that at that time, or at any other time.

Q. You knew that Prof. Derleth was one of the consultants of the District, who had been in the District and had been on the job practically all the time the work was under way?

A. You say all the time. He had been there occasionally, maybe once a month, and maybe once every two months. As a matter of fact, if I recall correctly, he had not been there very often up until about the time of the unfortunate cave-in of August 28th.

Q. Your recollection is that Prof. Derleth had

(Testimony of Stephen Davidson Bechtel.)

not been around the work there very often until just about the cave-in of August, 1935?

A. I think that is correct. That is my recollection. You asked me something that I have not thought of.

Q. That would be subject to correction if he had kept a record of it?

A. Absolutely.

Q. You don't know?

A. He might have been, when I did not see him, but as far as my recollection or knowledge goes I have no recollection of it.

Q. You knew he was one of the original designers of this tunnel section?

A. No. He was there as a consultant. I doubt very much whether he was one of the designers, because consultants usually do not do the designing, they do the consulting generally.

Q. You don't know whether or not Prof. Derleth was one of the men who participated in the design of the tunnel section, both A and B?

A. No.

Q. That was finally excavated?

A. His name was on the outside of the big volume of plans, in large letters. [1226]

Q. Did it lead you to believe from reading his name there that he had something to do with this job?

A. I knew that he was a consultant on the job.

Q. And that he was on the job at least as early as March 30, 1933, when the plans and specifications were adopted?

(Testimony of Stephen Davidson Bechtel.)

A. By "on the job" you mean connected with it?

Q. With the District. A. Yes.

Q. Now, then, is it not a fact that at this conversation Mr. Boggs, in reply to your request or statement that you desired to apply for an extension of time, Mr. Boggs stated to you that it was not apparent at that time that the Six Companies would require an extension of time and that before any extension of time could be granted it would have to be approved by the P.W.A. and the Board of Directors of the District, that in order to get such approval the Six Companies would have to have a good and substantial reason, and that he, Mr. Boggs, knew no reason for an extension and would not recommend it?

A. No, that is not correct. Mr. Boggs did say that he did not favor the extension of time at that time, because he did not know in substance, he did not know what period would be required.

Q. Isn't it true that at the time Mr. Boggs suggested that you defer your request for an extension of time until a short time before the completion date under the contract and that if it was then evident that Six Companies could not finish within the contract time——

A. He said he did not favor our making an application at that time.

Q. Will you please listen to this question and say whether this is a fact. I would like to have an answer.

A. I have answered you.

(Testimony of Stephen Davidson Bechtel.)

Q. I think not.

Mr. Marrin: I submit the witness has answered it fair and [1227] square, right on the nose.

Mr. Tinning: I am going to ask it again. Is it not true at this time and place Mr. Boggs suggested that Six Companies defer any request for an extension of time until a short time before the completion date established by the contract, if it was then evident that Six Companies could not finish within the contract time?

A. No, not as you state it. He said that he did not favor our making application for an extension of time then.

Q. Isn't it true that in reply to Mr. Boggs' statement to you that you said to him that you felt it was necessary to put in the request at that time as a matter of record, and that you were going to do so?

A. Yes.

Q. Isn't it a fact that at this conversation regarding the extension of time that nothing was said or claimed by you with respect to any condition or conditions on the job that were beyond your control?

A. No.

Q. Isn't it a fact that at the time of this conversation you stated nothing whatsoever about ground conditions being different than had been anticipated?

A. No; on the contrary, I stated that they were different than anticipated.

(Testimony of Stephen Davidson Bechtel.)

Q. What did you say at that time and place regarding any condition or conditions that you claimed were beyond your control, everything you said that you can remember?

A. To the best of my recollection I said in substance that the conditions on the job that had developed that were beyond our control substantially were as follows, that the ground conditions were far different from what had been anticipated, the weather for that period had been abnormally bad, and that we were having difficulty under the regulations of the contract, the restrictions in the contract, in getting an adequate supply of experienced men. That was in substance the point which I discussed, and that was with reference to all of the points that I [1228] discussed.

Q. Was that the first time that you ever communicated to Mr. Boggs the fact that the ground conditions were worse than you anticipated?

A. I believe it was.

Q. You have, as I understand, no notes or dates in your records to show when this conversation you referred to with Mr. Boggs occurred? After the notice or request for extension of time had been filed with the District, you remember you testified and said that the conversation occurred when you and your brother, Kenneth Bechtel, encountered Mr. Boggs somewhere on the job near the west portal, and it was a few days following the presenting

(Testimony of Stephen Davidson Bechtel.)

of your request for an extension on June 10, 1935. Is it not a fact that at this conversation that it was Mr. Kenneth Bechtel who asked Mr. Boggs if he, Boggs, had received the Six Companies' application for an extension of time? A. I don't recall.

Q. Isn't it true that Mr. Boggs at that time replied to them it was embarrassing to him because you had been asking for extensions and "I did not like to have to turn you down, but I know of no reason on which I could recommend an extension of time?"

A. I do not recall any such comment as that. I do recall that he said that it was embarrassing, and I also recall that he was disturbed over the matter.

Q. Do you remember another conversation with Mr. Boggs in June of 1935, near the east portal of the tunnel, at which were present yourself, Mr. T. M. Price, the project manager, Resident Engineer Gelston and District Engineer Boggs—the conversation occurring, as I understand it, near the east portal of the tunnel?

A. I do not recall at this time.

Q. Do you recall at that time and place this conversation occurred on June 20, 1935, at which time you stated that the district inspectors were too severe in their inspections and insistence that the work [1229] be done in accordance with the specifications?

A. No, I do not recall that, but it is quite possi-

(Testimony of Stephen Davidson Bechtel.)

ble that I said something to that effect. I doubt whether I said it in those words. I might have said that the district inspectors were abnormally severe and were going beyond common practice of construction, and beyond what was necessary to get the type of structure that was required in the specifications and contract, and for the work that was involved.

Q. And at the time, June 20, 1935, no concrete lining had been placed after December 5, 1935, so that the matters to which you were referring were inspection of outside work?

A. It might have been both; if it was said, and I do not say that it was said, but if it were said it undoubtedly came, my state of mind came from having observed the inspection which was being applied to both concrete structures and other portions of the work, in other parts of the job.

Q. In other words, the subcontractors as well as the contractor were required to build the work in accordance with the plans and specifications?

A. The subcontractors, as well as our own men, felt that they were being required to do an abnormal exactness of requirements.

Q. At this time, in referring to your statement with respect to the severity of the inspectors did Mr. Price state to Mr. Boggs and Mr. Gelston in your presence that Six Companies was ready and willing to furnish any amount of concrete and reinforcing steel necessary, the District to pay for the reinforcing steel, if the District would cooperate

(Testimony of Stephen Davidson Bechtel.)
and permit Six Companies to let the timbers intrude into the concrete lining section where the concrete was unplaced?

A. I don't recall that statement, but it is possible he made it.

Q. And then, following that request of Mr. Price to Mr. Boggs, did you hear Mr. Boggs tell him, Mr. Price, in your presence, that he would not permit Six Companies to place the concrete in if [1230] the timbers extended into the neat section?

A. I don't recall that, but on that point I would like to clarify, if I may, something that I said here yesterday, in which I possibly misstated or misinterpreted something. The question of the intrusion of the timbers, or the moving of the timbers was under discussion, and I think I told you that I did not know—the subject had come up without any previous thought on my part, without my knowledge you were going to bring it up, and my discussions were impromptu, I think I said I believed Mr. Price and Mr. Boggs had discussed the intruding of timbers, and that Mr. Boggs had first permitted one-quarter of an inch, and then half an inch, and then an inch. That was at that time my best recollection, or at least my understanding of it. However, subsequent to that I have gone to Mr. Price and checked the correctness of that, and I wish now to say that I was in error; I was under that impression, but I am advised by Mr. Price that was not the case, and I wish to withdraw that and clarify that.

Q. And that you were not authorized at any

(Testimony of Stephen Davidson Bechtel.)

time by Mr. Boggs to permit the intrusion of timbers into the concrete section?

A. That is correct.

Q. Following that conversation, the statement between Mr. Price and Mr. Boggs, do you remember that at that conversation you told Mr. Boggs that you had complained to him regarding the insistence, the rigorous insistence on following the plans and specifications on behalf of the subcontractors, and now that you had said it and had his reply, that you wanted him to know that Six Companies was going to insist as it proceeded with the concreting of the tunnel that the district inspectors be more cooperative?

A. I do not remember the discussion you are referring to, and who was present, if there was one, but it is quite possible I would say that, because I felt that very sincerely.

Q. Isn't it true at that time and place that Mr. Boggs told you [1231] that the inspectors were required to see that the work was done in accordance with the specifications and that they would continue to see that the work was done in substantial compliance with the terms of the contract and specifications?

A. I don't recall his saying that, but he may have, because that was the procedure which he generally followed.

Q. And that the contractor would not be permitted to install the concrete lining with the timbers intruding into the section?

(Testimony of Stephen Davidson Bechtel.)

A. I don't recall that.

Q. You would not say that did not occur?

A. No, I have no recollection of it.

Q. You testified that sometime in November of 1935 at a conversation with Mr. Boggs, I think you said Mr. Hindmarsh was present. Do you remember that meeting?

A. Yes.

Q. Are you able to fix the date on that, Mr. Bechtel?

A. I believe it was November 19, and the reason I say that is because the next day I dropped a memorandum to Mr. Hindmarsh to get his construction schedule, and that had been discussed.

Q. That is the only way you have of fixing that date?

A. Yes.

Q. Where did that conversation occur?

A. In the office of Mr. Hindmarsh and Mr. Price, in Six Companies' job office, and more particularly in the room that Mr. Hindmarsh and Mr. Price were occupying.

Q. And present at that meeting were Mr. Hindmarsh, yourself, Mr. Delancey Smith, and Mr. Boggs?

A. Yes.

Q. Isn't it a fact that when Mr. Boggs came to the meeting that Mr. Smith asked him what had happened in regard to the 48-hour week authorization?

A. I have no such recollection.

Q. Isn't it a fact that in reply to that inquiry Mr. Boggs stated to him that he, Mr. Boggs, had notified Mr. Price by telephone immediately on receipt of the authorization from Mr. Sweetser,

(Testimony of Stephen Davidson Bechtel.)

[1232] that he sent him a copy of Sweetser's letter at once?

A. He may have said that, I have no recollection of it. However, I do recall that at some time Mr. Boggs did phone Mr. Price—this is hearsay, but I understood from Mr. Price that Mr. Boggs had phoned him that we could proceed with the 40-hour per week, and that he would confirm it in due time, not 48.

Q. Let us get this straight. After the accident in 1935 you applied to the Board of Directors of the District on the 5th day of October, 1935, and made formal application for a 48-hour week in accordance with the recommendation of the Industrial Accident Commission of this State?

A. You may be correct.

Q. Evidence went in yesterday to show that you were authorized to work and you commenced working your crews 48 hours a week on the 13th day of October, 1935; that is true, is it not?

A. That we started work in October?

Q. On the 48-hour week.

A. I don't recall the date.

Q. And a letter went in here yesterday from Mr. Sweetser dated October 12, 1935, authorizing the 48-hour week.

A. I would not deny that. It is probably correct.

The Court: We will take a recess now until two o'clock.

(A recess was here taken until two o'clock p.m.)

(Testimony of Stephen Davidson Bechtel.)

Afternoon Session

STEPHEN DAVIDSON BECHTEL,

Cross Examination (continued)

Mr. Tinning: Q. Mr. Bechtel, we were discussing the conversation which you say occurred on November 19, 1935, at the noon adjournment. You stated you fixed the date of that meeting by the fact on the following day—you refreshed your recollection by the fact that on the following day you sent Mr. Hindmarsh some kind of a notice or instruction to proceed with the preparation of some paper. What document was it that you instructed Mr. Hindmarsh to prepare?

A. A revised construction schedule.

Q. In that discussion, was it true that there was some talk respecting operating, or authority to operate, with 48 hour week men on reopening of the drift excavation in the upgrade tunnel?

A. I don't recollect it.

Q. You do not recall it. As a matter of fact, at this time,—November 19, 1935,—you had practically completed the recovery of the tunnel from the slides and placing the concrete, and were at that time preparing to proceed with the further driving of the tunnel?

A. That is right.

Q. So far as you are able to recollect, there was no discussion as to the time or how long the men should work who were to work on the driving of the

(Testimony of Stephen Davidson Bechtel.)

tunnels henceforth when you resumed that work; you don't recollect that?

A. I don't recollect that.

Q. At that time, you asked Mr. Boggs something about the extension of time, and stated it appeared necessary that you apply for an extension of time; is that correct?

A. I don't recall it coming up in that way.

Q. At that time and in your presence, did you hear Mr. Delancey Smith state to Mr. Boggs that, during the last spring,—that would be the spring of 1935,—that Mr. Boggs stated the application for an [1234] extension of time was premature?

A. I don't recall that.

Q. Do you recall Mr. Delancey Smith said that Mr. Boggs had said at that time,—referring to the spring of 1935,—that an extension might not be necessary?

A. I do not recall that.

Q. Do you recall that Mr. Smith then asked Mr. Boggs if he, Mr. Boggs, still was of the same opinion?

A. I don't recall that.

Q. And then do you remember that Mr. Boggs stated in that conversation, to the persons present, that he still considered that an application for an extension of time on this date, November 19, 1935, would be premature; and, further, that, if you did make such an application, it must be approved by the PWA?

A. No; I have no such recollection.

(Testimony of Stephen Davidson Bechtel.)

Q. Do you recollect then Mr. Smith stated to Mr. Boggs that Mr. Boggs' recommendation would probably be followed by the PWA, and Mr. Smith stated to Mr. Boggs that, in view of an erroneous geology, unforeseen difficulties encountered by the Contractor, that the request might reasonably be granted? Do you recall Mr. Smith saying that to Mr. Boggs? A. No.

Q. And thereafter Mr. Boggs replied that such matters had already been discussed and acted upon, and that his recommendation was still no; do you recall that?

A. Not in any way at all. I do not believe that took place; but I have no recollection as to it.

Q. What do you think took place?

A. Well, I told you the other day.

Q. Will you tell us again?

A. Yes. This discussion was started as a general one, and developed into a discussion of the future construction schedule, as a matter of preparing the future construction schedule; and Hindmarsh was to make a future construction schedule up, which he said would take until about the first of the [1235] year to be able to, with reasonable accuracy, forecast the future schedule; and Boggs said that that would be fine—words to that effect; that when that was ready he would be glad to go over it with Mr. Hindmarsh and agree with him as to the correctness or reasonableness of the construction schedule; and would also review an application for extension of

(Testimony of Stephen Davidson Bechtel.)

time as to the time, the period of the extension of time that Mr. Hindmarsh would apply for, or the Company would apply for.

Q. Is that all of the conversation?

A. No; that the District's objections to our application up to then were not necessarily a question of our right to the extension, but they did not want to confuse the more major points that were of controversy, by discussing major controversies which existed between the District and ourselves.

Q. Was that the substance of the conversation?

A. The substance; that was the substance of the conversation.

Q. You took notes of that conversation?

A. No.

Q. Were any notes taken of that conversation?

A. I cannot answer that.

Q. What was Mr. Delancey Smith doing there?

A. Delancey Smith had been there; was advising us very closely; spent a great deal of time with me, in helping me; and I was relying upon him, and working with him for some months prior to that.

Q. What was he doing there on the occasion of the 19th of November, 1935?

A. Well, I have no recollection as to the particular purpose of it, Mr. Tinning.

Q. Pardon me.

A. It is not important. I was going to observe that, from time to time, he and I drove to the

(Testimony of Stephen Davidson Bechtel.)

ground. I would drive by his home and pick him up in the morning, and we would go out over the job, and then go on to San Francisco together. [1236]

Q. At that time and place, after Mr. Boggs had made his statement with respect to his recommendations for an extension, did you hear Mr. Smith say to Mr. Boggs that he realized that his recommendation,—Mr. Bogg's recommendation—that no extension be given, was Mr. Bogg's technical position; but that it might be possible to change that decision? Did you hear that?

A. I have no recollection.

Q. Would you say it was not said?

A. No; I have no recollection of that coming up at all. I am of the opinion it was not said; but it may have been.

Q. Do you recall, in that conversation, that Mr. Boggs said, in substance and effect, that he had considered the matter from all possible viewpoints, and, as he knew of no valid reason for an extension of time that had been suggested, the answer to the request would still be "No"?

A. No; I don't think he said that.

Q. Following that, did you then suggest to Mr. Boggs that he co-operate with you,—Six Companies,—and think up some good reason for an extension of time?

A. No; I have no recollection of that. I do recall that Mr. Boggs said that the application for exten-

(Testimony of Stephen Davidson Bechtel.)

sion of time should be on uncontroversial grounds, if possible.

Q. Do you remember Mr. Boggs saying to you, following your suggestion with respect to the reasons for an extension, that he thought there were brains enough in the Six Companies organization to prepare their own extension of time without his help?

A. No. That was not the spirit which Mr. Boggs discussed—or the spirit in which we were discussing it with him.

Q. Was it said by him?

A. I do not think it was said.

Q. Did Mr. Boggs ever suggest a new schedule of operations was in order, and that he would probably write and request a new schedule of progress?

A. Not just as you say it; I believe Mr. Boggs suggested or asked that we prepare a new construction schedule. [1237]

Q. Then did you state to him that you would prepare one and file one about January 1st?

A. I did not say that. I think that Hindmarsh, with whom he was discussing the matter of the future operations, said he would prepare it and have it ready about that time.

Q. And that you would accompany the schedule with a request for an extension of time; did you say that?

A. No. I don't remember any such discussion on any such points as that. There was a discussion,

(Testimony of Stephen Davidson Bechtel.)

as I recall it—it was between Mr. Boggs and Mr. Hindmarsh—that, at some time after the revised construction schedule was prepared and while they were considering the revised construction schedule, they would also prepare or go over together a draft of an application for extension of time, so it would be in form; and Mr. Boggs could recommend and approve it—recommend an approval that would go forward with his recommendation and approval.

Q. Then did you state to Mr. Boggs, following the discussion of the schedule and the proposed additional request for an extension of time, that you expected to start the drift work on the upgrade,—that would be the south tunnel,—in the next few days, to connect with the east portal drift?

A. I have no such recollection.

Q. Would you say you did not say that?

A. I don't think I said it. I won't say I did not say it; but I don't think I would say it, for the reason the matter of construction details and construction procedure had been carried on primarily between Mr. Boggs and Mr. Hindmarsh.

Q. Then did you state that, following the commencement of the work in the south tunnel, you would propose to take up the removal of the debris in the north tunnel that remained there, and then start driving your rings in both tunnels?

A. I don't recall that.

Q. Did you, in that conversation, advise Mr. Boggs that Mr. Hindmarsh was in charge of the

(Testimony of Stephen Davidson Bechtel.)

tunnel work, and to address all communications [1238] on the tunnel work to him?

A. I don't recall that.

Q. That Mr. Price was still project manager, but would be absent from the work from time to time? A. I don't recall that.

Q. Do you recall that Mr. Boggs then requested you to write him a letter authorizing any change in the manner in which communications were to be addressed by him, as District Engineer, from the District to the employees of the Six Companies?

A. I don't recall that. He may have such a letter, but I don't recall it.

Q. You did write such a letter the next day, didn't you?

A. I don't recall whether I did or not. It is probably in these numerous letters that have been introduced here.

Q. But you do not have any recollection?

A. I don't recall it at this moment; no.

Q. Although you recollect the conference, or the conversation, with Mr. Boggs on November 19th, by the fact on the day following you wrote a memorandum to Mr. Hindmarsh with respect to a schedule? A. That is right.

Q. Following this, there was some discussion, about details of construction, between Mr. Boggs and Mr. Hindmarsh, in which Mr. Boggs asked Mr. Hindmarsh to take up with Mr. Gelston, the District Resident Engineer—Do you remember that?

A. No.

Q. Do you remember that, following this, Mr. Boggs drove you and Mr. Smith to 40th and Broadway?

A. I don't recall that. He may have; but I don't recall it.

Q. Do you remember, as you drove in, in the car, that Mr. Boggs asked you what status Mr. O. W. Peterson, who was one of your consulting engineers who had been acting in the recovery work in the tunnel, would continue to have with Six Companies?

A. I don't recall, at this time; but I am just thinking here, now, at some time a discussion something to that effect took place. [1239]

Q. But you have no distinct recollection whether it was on the 19th of November or at some other time?

A. No.

Q. You have no distinct recollection of whether Mr. Boggs took you in from the work to 40th and Broadway where you took the Key Route train to San Francisco?

A. No.

Q. With Mr. Smith?

A. No.

Mr. Tinning: No further cross-examination.

Redirect Examination

Mr. Marrin: Q. Mr. Bechtel, where were the west portal buildings located, with reference to the portals of the tunnel?

A. They were located in a deep cut immediately adjacent to the west portal of the tunnels.

Q. Was there any necessity for getting those buildings constructed prior to the commencement of the construction on the tunnels?

(Testimony of Stephen Davidson Bechtel.)

A. Yes; the portal buildings were, in fact, the portals of the tunnel; and it was necessary to have them in shape to hold the portals of the tunnel as early as possible, particularly in view of the fact that the slopes on either side of this deep cut had slid, and there were additional slides, particularly as winter came on, and it was necessary to make every effort possible to rush the portal buildings and to backfill the portal building structures, in order to stop any possible cave-in of the slopes or sides of the deep cut, and also to stop the possibility of sloughing or sliding of the portion of the cut immediately over the top of the tunnels themselves; that was a hazardous situation, and it was recognized, and we did everything possible to rush those tunnels.

Q. The buildings, you mean?

A. The buildings.

Q. Could access be gained to the west portal of the tunnel until those buildings were partially constructed?

A. No; the placing of the building and the cross-members were directly in front of [1240] and had to be gone through or over, in approaching the drifts to the tunnels proper; and it was necessary to have those portions out of the way so we could have access to that other part.

Q. It did not make any difference whether that was done by the Six Companies or not, or a subcontractor?

(Testimony of Stephen Davidson Bechtel.)

A. It did not make a bit of difference; it is one of the construction problems of the portal buildings,—the construction itself; and whether it was done by subcontractors or Six Companies of California or anybody else it did not make a bit of difference; the work was carried on as a necessary part of the construction itself, in order to gain access to the tunnels and to carry the project, as a whole, forward as fast as possible.

Q. On your cross-examination, reference was made to the fact that the work on the west portal was shut down from August 3rd to August 23rd, and also that the west portal buildings were subcontracted. Did the fact that any buildings were subcontracted cause the shutdown?

A. It affected the shutdown in no way at all. The work was carried on by the subcontractors in anticipation of the tunnel approaches and for the portal buildings, and was carried on just as if it was done by our own operations.

Q. The shutdown was due to the nature of the ground? A. Yes.

Q. Mr. Bechtel, I show you Defendant's Exhibit "T",—which is a letter dated October 18, 1934, signed by Six Companies of California, apparently by yourself as president, addressed to the Honorable T. A. Reardon. You have seen that; it was read during your cross-examination? A. Yes.

Q. At the date of that letter, Mr. Bechtel, how

(Testimony of Stephen Davidson Bechtel.)

far had the excavation proceeded in the bottom drift on the west portal of the tunnel?

A. The bottom drift of the south tunnel had been driven—both of them had been driven in to their full depth of approximately 92 feet, and had been driven all that distance through very heavy and [1241] very bad ground; and, when we stopped, or ended those drifts, they were still in this very heavy ground.

Q. How about the north tunnel?

A. The north tunnel bottom drifts had been driven in their full distance, and these bottom drifts were driven approximately 110 feet, and also ended in soft, bad, heavy ground.

Q. So, at the date of this letter, you knew the nature of the ground which had been encountered in the 92 feet in the south tunnel and the 110 feet in the north tunnel?

A. I not only knew that, but it appeared we did not know how far or how much additional bad ground we would have; but we knew we had had bad ground in both those tunnels up to that time, through the entire length of the work on both tunnels.

Q. You testified, on your cross-examination, that, at the time excavation was stopped in the tunnels on August 21, 1935, there were approximately 900 to 1000 feet in each tunnel standing open under timber. How long had these portions of the tunnels been standing open under timber at that time?

(Testimony of Stephen Davidson Bechtel.)

A. Well, if I recollect, the question was to effect that the portion of the tunnel driven in January had been open some six months, and the portion driven in December had been standing some seven months; but that does not give the true reflection,—the true situation,—because they were standing a length of time dependent upon their position in the tunnel; those farthest from the portal had only been up a few days, and the majority of them had only been placed—the average length of time was probably less than three months; in other words, the average of the timber in the tunnels had probably been standing—were standing probably on an average of less than three months.

Q. In other words, as the tunnels were excavated, from about December up to August 21st; is that correct—

A. Yes.

Q. And they were timbered as they were excavated?

A. Yes. [1242] Immediately after.

Q. And the timbering toward the face of the tunnel had only been in a short time?

A. Well, a few days up to the time of— Probably an average of less than three months.

Q. Mr. Bechtel, I refer you to Plaintiff's Exhibit No. 47,—a letter addressed by Six Companies of California, by yourself as president, to the board of directors of Joint Highway District No. 13—

Mr. Wittschen: Give the date, please, Mr. Marrin.

Mr. Marrin: Q. —dated July 26, 1935. I will

simply read the last paragraph. The letter has been read in evidence before—I think it has all been read in evidence, and I simply want to draw your attention to the last paragraph:

“Within the past three months, Mr. Boggs, your chief engineer, has advised the writer of this letter that the delay in the progress of the work was beyond the control of the contractor and was in no manner our fault, and has stated we have a proper ground to request an extension of time, but that he would not approve such an application at this time because it might later develop that the extension of time would be unnecessary. He has made substantially the same statement to Mr. T. M. Price within the last sixty days and has likewise made substantially similar statements to Mr. DeLancey Smith. Under the circumstances, the grounds assigned in your letter of June 4th for denying the application are not in accord with the facts or with the opinion of your engineer, and therefore should be withdrawn, even though action on the application for an extension is deferred at this time.

“We, therefore, write this letter to protest against the denial of the extension for the reasons given in your letter, and to reaffirm the application made by our letter of June 10th and our right to an extension.” [1243]

Did you ever receive a reply to that letter?

A. To the best of my knowledge, we never did.

(Testimony of Stephen Davidson Bechtel.)

However, Mr. Marrin, is it not correct that that refers to a letter there on June 4th?

Mr. Marrin: I think there was a mistake in your copying?

Mr. Tinning: No; there is no mistake.

Mr. Marrin: There may be a mistake in the original letter.

Mr. Tinning: I think what you refer—what you were referring to was a letter— There was a mistake in the original letter, and we checked that.

Mr. Marrin: Yes.

Q. Well, I asked you whether you had received a reply to that letter, and you stated to the best of your recollection you had not?

A. That is correct; to the best of my recollection, I did not.

Mr. Marrin: No further questions.

Recross Examination

Mr. Tinning: Q. Mr. Bechtel, when you said the average length of time the timbers had stood in the tunnels, after installation and before concreting, was three months, you are taking the entire stretch of the tunnels excavated and standing with timber, taking an average of the whole, approximately 2000 feet or 1800 feet,—whatever the distance was?

A. I am expressing an approximation.

Q. Some of the timbers just above the excavated face where you were setting out the timbers had been placed that day?

A. That is correct.

(Testimony of Stephen Davidson Bechtel.)

Q. And some of them had been placed, furthest toward the west, had been placed there at the time the tunnel was excavated in either December or January? A. Yes.

Q. And what took place at Station 114 in the north tunnel before the slide occurred on the 28th of August was that your employees were [1244] resetting timbers where you had excavated on the 20th of February? A. I don't recall the date.

Q. If that was the date, that would be approximately 6 months before the letter of August 23rd?

A. Yes, if the dates you speak of are correct, that would make approximately 6 months.

Q. You have not looked up, since you testified, to check up on it?

A. I have never looked it up.

Q. With respect to your testimony regarding Plaintiff's Exhibit No. 47, in which you said that Mr. Boggs had told you and other people that he would grant you an extension of time, on the same day you wrote a letter dated July 26, 1935, in which you stated that if you did not have a reply—Plaintiff's Exhibit No. 57 is the letter that I am referring to—You will remember, Mr. Bechtel—I don't propose to try to confuse you; I am trying to get something cleared— You wrote two letters on July 26th to the Board of Directors,—one of them is your Plaintiff's Exhibit No. 47, which was with respect to the extension of time; and the other was your letter of same date, Plaintiff's Exhibit No. 57, in which you delivered an ultimatum to the District

(Testimony of Stephen Davidson Bechtel.)

if they did not agree to arbitration and answer you by the 7th of August, that you were going to cease work; and we did not answer either letter, did we?

Mr. Marrin: Mr. Tinning, that was arbitration merely on the lines and grades, wasn't it?

Mr. Tinning: Yes; but we had an ultimatum. I will read you—

A. I think you are referring to a separate letter.

Q. Of the same date?

A. Yes; that may be correct.

Q. Written by you, on the same day; which states, in the last paragraph—or the last two paragraphs, reading from page 3, Exhibit 57:

“In the event that you are unwilling to submit the matter to arbitration, we will expect to immediately commence such legal proceedings as may be necessary or proper to determine our rights in the matter. [1245]

“In order that a speedy settlement may be reached, we ask that you reply to this letter by August 7, 1935. If we do not receive an affirmative answer by that time, we will consider that you do not care to arbitrate the matter and commence such legal proceedings as may be proper, as above suggested.”

You did not commence any legal proceedings?

A. No; to the best of my knowledge, we did not. However, we did start, or continue, our endeavor to negotiate with Boggs, trying to work this out on an

(Testimony of Stephen Davidson Bechtel.)

amicable, reasonable, practical basis; and we continued, after that, up to May, 1936.

Q. Is it your conclusion, then, from the correspondence, that you have heard read while you have been sitting here, that you continued in an amicable manner to try to work this matter out?

A. We continued for a long, long time; and we continued through 1934; we continued through 1935; and we continued until 1936, up to the time we were driven from the job.

Q. You were driven from the job at 10:45 p. m.—let me finish— When you were driven from the job at 10:45 p. m., on Saturday night, June 13th, when you telephoned you were quitting work?

A. No; that was not the date we were driven from the job. We were driven from the job when you people broke faith and when you started extracting penalties from monies that were reasonably due us.

Q. And you negotiated right up to June 13, 1936?

A. I do not think I refer to June, Mr. Tinning. I think I referred up to May.

Q. You were not driven from the job until the 13th of June, 1936?

A. Well, you may be right about the date, Mr. Tinning.

Q. We will now go back to the subject we were discussing,—the letters of July 26, 1935. You had no reply?

A. That is as I understand it. [1246]

Q. And you continued to work?

A. Yes.

Mr. Tinning: Thank you. That is all.